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A frame-semantic approach to selectional restrictions in German Support Verb Constructions: The case of [in X *geraten*]

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A frame-semantic approach to selectional restrictions in German Support Verb Constructions: The case of [in X *geraten*].

by

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Dedication

To Anita Paravicini-Signorell
my grandmother, knowing she is smiling down on me.

And to my wonderful parents for all their love and unconditional support of all my endeavors.

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A frame-semantic approach to selectional restrictions in German Support Verb Constructions: The case of [in X *geraten*]

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Support verb constructions (henceforth: SVCs) are constructions consisting of a verb with a reduced meaning (when compared to the full verb) and a noun. Previous analyses (e.g. von Polenz 1963, Winhart 2002) provide a detailed account of the function of the verb in SVCs. However, neither of the two approaches fully explains why certain verb-noun combinations are unacceptable. *Geraten* ('to get into') can combine with *Brand* ('fire') in but not with *Feuer* ('fire') even though the two nouns are synonyms.

This dissertation proposes a novel approach towards identifying selectional restrictions in German support verb constructions by applying insights from Frame Semantics (Fillmore 1985) and Construction Grammar. It differs from syntactic-centric and lexical-conceptual structure approaches in that frame-semantic information is shown

to directly influence a verb's and a noun's ability to combine with each other. I argue that the nominalization *Feuer* cannot combine with the support verb because the frame-semantic information evoked by *Feuer* is incompatible with the frame semantics of *geraten*. Thus, either the verb and/or the noun blocks the formation of a support verb construction. My analysis demonstrates that in order for the support verb and the noun to be able to combine, their frame-semantic information needs to be compatible. However, in some circumstances SVCs need to be listed as idioms in the lexicon because there do not seem to be any compositional restrictions that allow *geraten* to combine with *Brand* ('fire'), but not *Feuer* ('fire'). Based on a corpus of more than 1000 SVCs with *geraten*, I show that there are different patterns of productivity and idomaticity. Some SVCs, such as *ins Rollen geraten* ('to start rolling'), allow widespread replacement of the noun with near-synonyms. Other SVCs, such as *in Brand geraten* ('starting to burn'), do not allow such replacement. In this view, both the abstract meaning of an SVC (e.g., *in X geraten* 'to get into X') and item-specific knowledge needs to be captured to be able to account for the full range of SVCs headed by *geraten*. Therefore, I posit a new construction that captures all the meanings expressed by SVCs with *geraten*.

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Leipzig Glossing Rules

List of Abbreviations

1	first person
2	second person
3	third person
ACC	accusative
ADJ	adjective
ADJC	comparative adjective
ADJS	superlative adjective
ADJEND	adjective ending
ADV	adverb(ial)
ADVC	comparative adverb
ADVS	superlative adverb
AGR	agreement
ART	article
ARD	definite article
ARI	indefinite article
AUX	auxiliary
CONJ	conjunction
CONJS	subordinating conjunction
CONJC	coordinating conjunction

COP	copula
DAT	dative
DEF	definite
DEM	demonstrative
DET	determiner
EX	expletive
F	feminine
FORML	formal
FUT	future
GEN	genitive
INDF	indefinite
INF	infinitive
INTR	intransitive
M	masculine
N	neuter
N-	non- (e.g. N-SG nonsingular)
NBR	number
NBRO	ordinal number
NBRC	cardinal number
NEG	negation, negative
NOM	nominative
OBJ	object

PASS	passive
PFX	prefix
SPFX	separable prefix
IPFX	inseparable prefix
PL	plural
POSS	possessive
PRF	perfect
PRP	preposition
PRPA	accusative preposition
PRPD	dative preposition
PRPG	genitive preposition
PRPE	either/or preposition (acc/dat)
PRS	present
PRON	pronoun
PST	past
PTCP	participle
Q	question particle/marker
REFL	reflexive
REL	relative
SBJ	subject
SG	singular

Chapter 1

Introduction

1.1 Subject of Study

The goal of this dissertation is to examine the selectional restrictions of nominals in German support verb constructions (SVCs).[1] These semi-idiomatic constructions take on specific meanings in everyday speech and are used because they are able to express more information than their full verb counterparts. Helbig & Buscha (1989) distinguish between the concept of *Vollverb* ('full verb') and *Funktionsverb* ('support verb'). They argue that the full verb contains its full meaning whereas the support verb is greatly reduced in semantic content; i.e. support verbs contribute verbal valence but not their full verbal meaning to the sentence. Consider, for example, the sentences in (1.1) showing a range of support verbs.[2]

(1.1) a. Das kleine Kind *gerät* wegen
the[ARD.NOM.N] small:ADJ;NOM child:NOM;SG;N gets:3SG because of:PRPG
des Unwetters *in Angst*.
the:ARD;GEN thunderstorm:GEN;SG;N in:PRPE fear:SG;F.
'The young child becomes frightened because of the thunderstorm.'

b. Der Magier bringt die Zuschauer
the[ARD.SG.M] magician:SG;M brings:3SG the:ARD;PL spectators:PL
zu-m Erstaunen.
to:PRPD-the:ARD;SG;DAT;N amazement:SG;N.
'The magician amazes the spectators.'

[1] See von Polenz (1963), Fischer (1977), Helbig & Buscha (1989), Rösch (1994), Winhart (2002), and Langer (2010), among others for other analysis of SVCs.

c. Das Auto kommt in Fahrt.
the[ARD.SG.N] car:SG;N comes:3SG in:PRPE drive:SG;F.
'The car starts to move.'

A compositional reading of (1.1) leads to difficulties in interpretation because the verbs *geraten* ('to get'), *bringen* ('to bring'), and *kommen* ('to come') act as support verbs and thus do not carry their full verb lexical meaning. For example, *geraten* in the SVC does not indicate motion towards a goal but rather indicates an unintentional change on the part of the patient. SVCs consist of a patient N(oun) P(hrase), a support verb, an optional agent NP, and a P(repositional) P(hrase). The structure of SVCs can be represented as follows.

(1.2) [[NP] V_{Supp} ([NP]) [PP]]

The optionality of the agent NP has led to a good deal of research over the years, and a few brief contextual remarks on it with regard to SVCs are therefore in order here. Von Polenz (1989), among others, describes SVCs with *geraten* as passive SVCs because of the similarity between the grammatical passive and passive SVCs. In fact, it is possible to explain the optionality of the agent NP in SVCs with *geraten* by comparing such SVCs with passive sentences. For example, Ackerman & Webelhuth (1998) argue that a difference between active and passive sentences is that the logical subject can be omitted in the passive, but not in the active, as the examples in (1.3) indicate.

(1.3) *weil dem Mann die Blumen schenkt
because:CONJS the:ARD;DAT man:M;SG the:ARD;PL flowers:PL gives:3SG
'ø gives the flowers to the man' (Ackerman & Webelhuth 1998: 223)

In order to test for the optional agent NP in (1.2) the *by itself* diagnostic[3] can be used to determine whether the agent in SVCs is implicit. Beavers & Zubair (in press: 15) argue "that inchoatives but not passives are compatible with modifiers meaning 'by itself', on the reading that the event occurred without external causation." The following English examples, taken from Koontz-Garboden (2009: 96-97), illustrate this point.

(1.4) a. *The boat sank to collect the insurance.
b. The boat was sunk to collect the insurance.
c. The boat sank by itself.
d. *The boat was sunk by itself.[4]

The sentences in (1.4a) - (1.4b) show that a passive verb (as in 1.4b) can, as Koontz-Garboden (2009:96) phrases it, "control into a purpose clause," while the inchoative verb cannot (as in 1.4a). Examples (1.4c) and (1.4d) indicate that "while *by itself* can be bound by the single argument of the inchoative verb [as in (1.4c)], it cannot be bound by the single argument of the passive verb [as in (1.4d)]" (Koontz-Garboden 2009: 97). The same generalization as discussed by Koontz-Garboden (2009) holds for German, as the following sentences illustrate:

[3] See Siewierska (1984), Chierchia (2004), Koontz-Garboden (2009), and Beavers & Zubair (in press), among others, for additional discussion of this diagnostic.
[4] For some native speakers of English, this sentence is acceptable if it is interpreted as meaning 'the boat was the only thing that was sunk.'

(1.5) a. *Die Vase zerbrach um die
the[ARD.F.SG] vase:F;SG broke:3SG;PST for:PRPA the:ARD;F;ACC
Versicherungsprämie zu erhalten.
insurance premium:F;SG to receive:INF.
*'The vase broke to collect the insurance.'

b. Die Vase wurde zerbrochen um
the[ARD.F.SG] vase:F;SG was:3SG;PST broken:PST;PTCP for:PRPA
die Versicherungsprämie zu erhalten.
the:ARD;F;ACC insurance premium:F;SG to receive:INF.
'The vase was broken to collect the insurance.

c. Die Vase zerbrach von selbst.
the[ARD.F.SG] vase:F;SG broke:3SG;PST by:PRPD itself:PRON;REFL.
'The vase broke by itself.'

d. Die Vase wurde *von selbst
the[ARD.F.SG] vase:F;SG was:3SG;PST by:PRPD itself:PRON;REFL
zerbrochen.
broken:PST;PTCP.
*'The vase was broken by itself.'

As for SVCs with *geraten*, these constructions show a passive change of state. In such constructions, the underlying full verb "is not a *Tätigkeitsverb*[5] because it does not require a (prototypical) agent role" (Rösch 1994: 24). Like passive sentences, SVCs with *geraten* include an implicit agent argument, as in the following examples.

(1.6) a. Die Mutter geriet in Rage.
the[ARD.F.SG] mother:F;SG got:3SG;PST in:PRPE rage:F;SG.
'The mother got mad.'

b. Die Mutter geriet durch das
the[ARD.F.SG] mother:F;SG got:3SG;PST through:PRPA the:ARD;N;ACC;SG
Kind in Rage.
child:N;SG in:PRPE rage:F;SG.
'The mother got mad because of the child.'

[5] Roughly speaking, a 'verb of doing'.

c. *Die Mutter geriet von selbst in
the[ARD.F.SG] mother:F;SG got:3SG;PST of:PRPE herself:PRON;REFL in:prpe
Rage.
rage:F;SG.
'*The mother got mad of her own volition.'

Sentences (1.6a) and (1.6b) follow the pattern described above: the agent (*das Kind* ('the child')) can be omitted from the SVC with the understanding that some type of agent caused the change of state in the mother's mood.[6] The ungrammaticality of (1.6c) shows that an SVC with *geraten* cannot be used to express the idea that the mother became enraged without cause. This indicates that the use of an SVC with *geraten* always requires an implicit agent.

The above tests show that there is always an implicit agent when using SVCs with *geraten*. That the change in state of the patient is caused by an agent can also be shown by the sentence (1.7), indicating a contradiction.

(1.7) *Die Frau gerät in Angst, aber
the[ARD.F.SG] woman:F;SG gets:3SG in:PRPE fear:F;SG, but:CONJS
nichts/niemand verängstigt sie.
nothing:PRON/nobody:PRON scares:3SG she:PRON;F;SG.
'The woman becomes afraid, but nothing/nobody scares her.'

[6] To put it in terms of Koontz-Garboden's (2009) argument, *von selbst* ('by itself', 'of its own volition') cannot be bound by the argument of *geraten*.

(1.7) is a contradiction, because there is no reason for the woman to become scared if there is nothing/nobody of which she could become afraid. Clearly, something caused her to become afraid.

The question of whether the cause is external and/or internal also needs to be addressed. According to Dowty (1991: 571), it is hard to "pin down the traditional role types because role types are simply not discrete categories at all, but rather a cluster of concepts." The following proto-patient and proto-agent properties are listed by Dowty (1991).

Agent Proto-Role	Patient Proto-Role
volitional involvement in the event or state	undergoes change of state
sentence (and/or perception)	incremental theme
causing an event/change of state in another participant	causally affected by another participant
movement relative to another participant	stationary relative to movement
(exists independently of the event)	(does not exist independently of event)

(cf. Dowty 1991: 572)

In addition, Lakoff (1996) argues that humans, under certain circumstances, perceive their bodies as two separate entities, namely as agents and as patients. Compare the following sentences, illustrating the points made by Dowty (1991) and Lakoff (1996).

(1.8) a. Die Frau gerät durch das
the[ARD.F.SG] woman:F;SG gets:3SG through:PRPA the:ARD;N;ACC;SG
Geschrei des Kindes in Angst.
scream:N;SG the:ARD;N;GEN child:N;GEN in:PRPE fear:F;SG.
'The woman becomes frightened because of the child's scream.'

b. Die Frau gerät durch ihre eigene
the[ARD.F.SG] woman:F;SG gets:3SG through:PRPA hers:PRON own:ADJ;F;SG
Dummheit in Angst.
stupidity:F;SG in:PRPE fear:F;SG.
'The woman becomes frightened because of her own stupidity.'

In both sentences, the woman becomes fearful. These sentences differ in that (1.8a) contains an external causer, namely the child, while in (1.8b), the cause is internal. Applying Dowty's proto-role properties to (1.8a) and (1.8b) the assigned roles in (1.8a) are *die Frau* ('the woman') as patient and *das Geschrei* ('the scream') as agent. Using Lakoff's (1996) observation stated above, *durch ihre eigene Dummheit* ('through her own stupidity') in (1.8b) is interpreted as the external agent, even though the patient is causing herself to become afraid. That is, the woman is the patient and agent at the same time and therefore causing her own change of state.[7] The examples in (1.8) suggest that the agent is not primarily motivated by syntactic or semantic properties, but rather by pragmatic ones (see Beavers & Zubair in press for an in-depth discussion of this type of causation).

Finally, the question of whether or not the agent is (obligatorily) syntactically expressed also needs to be answered. Consider example (1.9).

[7] See Boas (2003: 242-244) for a concise explanation of 'divided-person' in resultatives.

(1.9) a. *Sie gerät in Angst, um sie
she[PRON] gets:3SG in:PRPE fear:F;SG, for:PRPA she:PRON;F
am Weggehen zu hindern.
at:PRPD-the:ARD;N;DAT leaving:N;SG to hinder:INF.
'She becomes frightened to keep her from leaving.'

b. Der böse Mann hat sie in
the[ARD.M.SG] mean:ADJ;M man:M;SG had:3SG;PST she:PRON;F in:PRPE
Angst gebracht, um sie a-m
fear:F;SG brought:PST;PTCP, for:PRPA she:PRON;F at:PRPD-the:ARD;N;DAT
Weggehen zu hindern.
leaving:N;SG to hinder:INF.
'The mean man scared her, in order to keep her from leaving.'

The fact that the purposive is not possible in (1.9a) suggests that the semantic causer is not syntactically present albeit covert as would be the case in the passive. The data in (1.9b) supports this by showing, that if the causer is added the purposive is grammatical. Thus, I argue that SVCs semantically entail causation but it is not always syntactically encoded.

Expressing the agent may provide (necessary) information required for successful communication. Not expressing the agent is an option, if leaving it out does not hinder communication of the intended meaning. In other words, linguistically there is always a cause, whether expressed or not.

Even though a great amount has been written on German SVCs during the past forty plus years (von Polenz (1963), Helbig & Buscha (1989), Ahmed (2000), and Winhart (2002), among others), certain aspects of the nature of SVCs remain to be

explored.[8] Because SVCs cannot strictly be classified as being part of the lexicon or of the syntax due to their semi-compositional nature, they represent a special challenge to formulating an analysis which adequately expresses that some of the semantic properties cannot be predicted from the parts of the SVCs. The following sentence pairs illustrate support verb constructions (1.10a) – (1.13a) which have a full verb counterpart (1.10b) – (1.13b). In the (a) sentences the support verb construction is italicized, and in the (b) sentences the corresponding full verb is italicized.

(1.10) a. Der Student *stellt* *Untersuchungen* über
the[ARD.NOM.M] student:NOM;SG;M puts:3SG investigations:PL over:PRPE
Funktionsverbgefüge *an*.
functionverbconstructions:PL on:SPFX.
'The student investigates support verb constructions.'

b. Der Student *untersucht*
the[ARD.NOM.M] student:NOM;SG;M investigates:3SG
Funktionsverbgefüge für seine Dissertation.
functionverbconstructions:PL for:PRPA his:PRON;3SG dissertation:SG;F.
'The student investigates support verb constructions for his dissertation.'

(1.11) a. Die Mutter *bringt* das schreiende
the[ARD.NOM.F] mother:SG;F brings:3SG the:ARD;ACC crying:ADJ;ACC;SG
Kind *zu-r* *Ruhe*.
child:SG;N to:PRPD-the:ARD;DAT silence:SG;F.
'The mother calms the crying child.'

[8] Ruppenhofer et al. (2010: 18) define support verbs as follows: "In some situations, there are differences between the syntactic and the semantic headedness of a clause. For instance, *Pa gave her a lecture* has *give* as its syntactic head. However, from a semantic point of view the sentence reports an act of lecturing, not one of giving. We understand cases such as *give a lecture* to involve frame-evoking nouns that are syntactically 'supported' by verbs in order to be able to project clauses. This analysis is strengthened by the fact that noun-support verb combinations typically involve the selection of the verb by the frame-bearing noun (**make/give a lecture* v. *make/*give an attempt*). An important consequence of this analysis is the annotation of subjects of support verbs as frame elements relative to the noun. Thus, the example sentence *Pa gave her a lecture* would be annotated with respect to the target *lecture*, with *gave* marked as a support verb, *Pa* marked as the SPEAKER and *her* marked as the ADDRESSEE."

b. Die Mutter *beruhigt* das schreiende
the[ARD.NOM.F] mother:SG;F calms:3SG the:ARD;ACC crying:ADJ;ACC;SG
Kind.
child:SG;N.
'The mother calms the crying child.'

(1.12) a. Die Prinzessin *gibt* dem Frosch *einen*
the[ARD.NOM.F] princess:SG;F gives:3SG the:ARD;DAT frog:SG;M a:ARI;ACC
Kuss.
kiss:SG;M.
'The princess gives the frog a kiss.'

b. Die Prinzessin *küsst* den Frosch.
the[ARD.NOM.F] princess:SG;F kisses:3SG the:ARD;ACC frog:SG;M.
'The princess kisses the frog.'

(1.13) a. Der Minister *stellt* die
the[ARD.NOM.M] minister:SG;M puts:3SG the:ARD;ACC
Nichtteilnahme a-m Parteitag
nonparticipation:NEG;SG;F on:PRPE-the:ARD;DAT partyday:SG;M
unter *Strafe*.
under:PREPE punishment:SG;F.
'The minister puts non-participation at the party conference under punishment.'

b. Der Minister *bestraft* die
the[ARD.NOM.M] minister:SG;M punishes:3SG the:ARD;ACC
Nichtteilnahme a-m Parteitag.
nonparticipation:NEG;SG;F on:PRPE-the:ARD;DAT partyday:SG;M.
'The minister punishes non-participation at the party conference.'

In contrast to the examples in (1.2) and (1.10) – (1.13), other support verb constructions do not have a full verb counterpart that could serve as paraphrases of the SVCs, as the following examples illustrate.

(1.14) a. Die kontrollierte Explosion *bringt* das
the[ARD.NOM.F] controlled:3SG explosion:SG;F brings:3SG the:ARD;ACC;N
Hotel *zu-m* *Einsturz*.
hotel:SG;N to:PRPD-the:ARD;DAT collapse:SG;M.
'The controlled explosion causes the hotel to collapse.'

b. *Die kontrollierte Explosion stürzt das
the[ARD.NOM.F] contolled:3SG explostion:SG;F collapses:3SG the:ARD;ACC
Hotel ein.
hotel:SG;N a:SPFX.
'The controlled explosion collapses the hotel.'

(1.15) a. Der Steuerzahler *gerät* mit den
the[ARD.NOM.M] taxpayer:SG;M gets:3SG with:PRPD the:ARD;DAT;PL
Ratenzahlungen *in* *Verzug*.
installments:PL in:PRPE arrears:SG;M.
'The taxpayer falls behind with the payment of his installments.'
b. *Der Steuerzahler verzögert mit den
the[ARD.NOM.M] taxpayer:SG;M delays:3SG with:PRPD the:ARD;DAT;PL
Ratenzahlungen.
installments:PL.
'The taxpayer delays the payment of the installments.'

(1.16) a. Wöchentliche Säuberungen *halten* die Wohnung *in*
weekly:ADJ;F cleanings[NOM.PL] hold:3PL the:ARD apartment:SG;F in:PRPE
Ordnung.
order:SG;F.
'Weekly cleanings keep the apartment orderly.'
b. *Wöchentliche Säuberungen ordnen die Wohnung.
*weekly:ADJ;F cleanings[NOM.PL] organize:3PL the:ARD apartment:SG;F.
*'Weekly cleanings organize the apartment.'

Sentences (1.14b) and (1.15b) are unacceptable because *einstürzen* ('to collapse') does not allow the causing event to be expressed by a subject and *verzögern* ('to delay') does not take a *mit*-PP ('with'-PP), respectively. In (1.16b) the implication is that the cleaning is keeping the apartment and not the person doing the cleaning.

The following examples illustrate some selectional restrictions in German SVCs.

(1.17) a. Das Auto gerät in-s Rollen.
the[NOM.ARD.N] car:SG;N comes:3SG in:PRPE-the:ARD;ACC;N rolling:SG;N.
'The car begins to roll.'

b. ?Das Auto gerät in Gang.
?the[NOM.ARD.N] car:SG;N comes:3SG in:PRPE gear/motion:SG;M.
'The car comes into motion.'
c. *Das Auto gerät in-s Stehen.
the[NOM.ARD.N] car:SG;N comes:3SG in:PRPE-the:ARD;ACC;N standing:SG;N.
'The car comes to a halt.'

(1.17b) is questionable and (1.17c) is unacceptable on semantic grounds, because the nouns replacing *Rollen* ('rolling') in (1.17a) are not acceptable substitute nouns. *In Gang* ('into gear/in motion') is interpreted as putting into gear, because of its use with *Auto* ('car') in (1.17b).

In (1.17c) both the support verb and the preposition, are not compatible with the meaning the SVCs wants to convey, namely that the car comes to a halt. The correct support verb would be *kommen* ('come') with the contraction *zum* ('to a').[9] The meaning of (1.17c) is that the car stood up. The semantically unacceptable sentences in (1.17) show that not every noun, even though the nouns might be close in meaning, can act as a substitute noun in SVCs with *geraten*. Example (1.18) illustrates that nouns select their support verbs.

(1.18) a. Die Dissertation bringt den
the[NOM.ARD.F] dissertation:SG;F brings:3SG the:ARD;ACC;M
Studenten zu-r Verzweiflung.
student:SG;ACC;M to:PRPD-the:ARD;DAT;F despair:SG;F.
'The dissertation drives the student to despair.'
b. *Die Dissertation bringt den
the[NOM.ARD.F] dissertation:SG;F brings:3SG the:ARD;ACC;M
Studenten zu-r Hoffnungslosigkeit.
student:SG;ACC;M to:PRPD-the:ARD;DAT;F hopelessness:SG;F.
'The dissertation drives the student to hopelessness.'

[9] *Zum* is a contraction of the preposition *zu* ('to') and the definite article *dem* ('the') in the dative case.

c. *Die Dissertation bringt den
the[NOM.ARD.F] dissertation:SG;F brings:3SG the:ARD;ACC;M
Studenten zu-r Niedergeschlagenheit.
student:SG;ACC;M to:PRPD-the:ARD;DAT;F disheartenment:SG;F.
'The dissertation drives the student to disheartenment.'

In (1.18) the noun *Verzweiflung* is replaced by two near-synonyms, *Hoffnungslosigkeit* ('hopelessness') in (1.18b) and *Niedergeschlagenheit* ('disheartenment') in (1.18c). However, (1.18b) and (1.18c) were judged unacceptable by native German speakers, because neither *Hoffnungslosigkeit* nor *Niedergeschlagenheit* select the support verb *bringen*.

(1.19) a. Die Konzernleitung stellt grosse
the[NOM.ARD.F] corporate management:SG;F puts:3SG large:ADJ;PL;F
Bonizahlungen in Aussicht.
bonuspayments:PL in:PRPE view:SG;F.
'Corporate management promises big bonus payments.'
b. ?Die Konzernleitung stellt grosse
the[NOM.ARD.F] corporate management:SG;F puts:3SG large:ADJ;PL;F
Bonizahlungen in Möglichkeit.
bonus payments:PL in:PRPE possibility:SG;F.
'Corporate management announces the possibility of big bonus payments.'
c. *Die Konzernleitung stellt grosse
the[NOM.ARD.F] corporate management:SG;F puts:3SG large:ADJ;PL;F
Bonizahlungen in Perspektive.
bonus payments:PL in:PRPE perspective:SG;F.
*'Corporate management puts big bonus payments in perspective.

Similar arguments can be made for the unacceptability of (1.19b) and (1.19c). Example (1.19b) is marginally acceptable since *Möglichkeit* ('possibility') can be viewed as partially conveying the meaning of the original SVC. *Perspektive* ('perspective') in

(1.19c) is not acceptable, because *Perspektive* does not convey the same meaning as *Aussicht* ('view'). That is, perspective implies a particular point of view with respect to some other event. *Aussicht* implies the possibility that bonus payments will be made, and only *Aussicht* is compatible with the support verb *stellen* ('put') to give the reading of 'to put forth as a prospect.'

Based on an in-depth analysis of data such as in (1.17) - (1.19), this dissertation investigates which factors influence the selectional restrictions of the nominal part in SVCs. In particular, I seek answers to the following three research questions:

1. Is it possible to predict systematically the types of nouns that occur in German SVCs? If so, how?

Prior research on Multiword Expressions (MWEs) and Idioms has shown that they are difficult to analyze (see Nunberg et al. (1994), Sag et al. (2001), and Riehemann (2001) among others). Sag et al. (2001) classify MWEs into two broad categories - lexical and institutional phrases. Lexical phrases are further sub-divided into fixed expressions, semi-fixed expressions and syntactically-flexible expressions. SVCs in German fall into the syntactically-flexible category because they adhere to constraints on word order and composition but still allow for some degree of variation either lexically or syntactically. SVCs in German must follow a specific syntactic pattern, but still allow for some syntactic variation, i.e. SVCs follow a 'major' pattern (Hunston & Francis 2000) but do not lack syntactic variability like idiomatic expressions, e.g. "kick the bucket."

2. To what degree are German SVCs transparent, motivated, and/or arbitrary?

This question sheds some light on the discussion about the fixedness of idiomatic expressions. If such expressions are fixed, then they must be listed in the lexicon as such. To what degree, then, are SVCs idiomatic and how much of the information must be listed in the lexicon? Are semi-productive patterns listed in the lexicon or should the patterns be generated by the syntax? In addition, if SVCs are considered fixed expressions, then variability should be either prohibited or highly restricted.[10]

3. How detailed should the lexical representation of entries of German SVCs be?

In order to account for the productivity of SVCs in German, it is necessary to list the rules that restrict the production of unacceptable instances in either the lexicon or as a part of every noun. The answers I provide here show that a minimal lexicon is not able to produce the wide array of possible SVCs with *geraten*, and that the production of novel SVCs with *geraten* cannot be attributed to rules affecting the syntax since the syntax does not change. Lexical entries of nouns must maximally include all necessary restrictions. Thus, I show that SVCs with *geraten* cannot be relegated to being listed in the lexicon as idiomatic expressions, and since they are semi-compositional they also cannot be

[10] For detailed discussions of idioms see, among others, Mel'čuck (1984); Fillmore, Kay & O'Connor (1988); Geeraerts (1989); and Wulff (2010).

generated by syntactic rules alone.[11] The analysis presented here is by no means the only possible approach to investigating SVCs in German and does not claim that other analyses are not able to account for SVCs as well; however, it provides an intuitive account of selectional restrictions in SVCs with *geraten* based on semantic and cognitive insights.

Before going into detail, I first provide a brief summary of the differences in terminology and definitions regarding SVCs in the remaining sections of this chapter. Then, I present a brief outline of this dissertation. To answer my three research questions, I focus on a particular subtype of German SVCs, namely those headed by *geraten* as in *Das Haus gerät in Brand* ('The house catches on fire.')

1.2 Differences in terminology and frameworks

One of the first attempts to analyze SVCs in English can be found in Poutsma (1926: 394), who writes that "there is a marked tendency in Modern English to express a verbal idea by means of a combination consisting of a verb with a vague meaning and a noun of action. The latter is then the real significant part of the predicate, while the former merely serves the purpose of a connective." Later, Jespersen (1942: 117), who introduced the term *light verbs* for these constructions, argues that

> the most usual meaning of sbs [substantives] derived from and identical in form with a vb [verb] is the action or an isolated instance of the action. This is particularly frequent in such everyday combinations as those illustrated in the

[11] See Fillmore, Kay & O'Conner (1988); Fellbaum et al. (2006); and Boas (2008), among others, for further discussion.

> following paragraphs after *have* and similar light verbs. They are in accordance with the general tendency of ModE to place an insignificant verb, to which the marks of person and tense are attached, before the really important idea – cf combinations with *do*, *can* etc.

Thus, when these verbs occur in SVCs (or 'light verb' constructions) they are semantically reduced and occur in examples like *take a picture* or *have a debate*. The term "light verb" is not restricted to verb-noun constructions and many are expressions of specific nominalizations and are not directly translatable from English into other languages.[12]

Another strand of research – prominent in German linguistics – analyzes verb-noun constructions of the type in (1.2) as *Funktionsverbgefüge* (FVG) (function verb constructions), as proposed by von Polenz (1963). A FVG, such as *zur Entscheidung bringen* ('bring to a decision'), is a semi-compositional multi-word expression consisting of a verb (function verb, hereafter FV) that is semantically reduced or empty, plus a predicative noun. Both the FV and the noun are the predicate of the sentence, thus forming a semantic unit.

The third and final type discussed here are *Support Verb Constructions* (Gross (1981),[13] which consist of a semantically reduced or empty support verb (SV) and a predicative noun, as in *'He is taking a bath'*. The semantic center of the construction is the noun, while the SV contributes syntactic valence to the overall sentence. As mentioned above, SVCs are semi-compositional expressions in which a semantically

[12] See Jespersen (1942), Cattell (1984), Kearns (2002), Butt (2003), and Langer (2008) for discussions of translatability.
[13] The term *support verb construction* is a translation of the term *constructions à verbe support* used in French linguistics.

transparent player selects a semantically reduced part.[14] Throughout this work, I use the term *Support Verb Construction* as a cover term to also include the terms *light verb construction* and *Funktionsverbgefüge* unless I am quoting, in which case I follow the usage of the sources. In addition, I use the term *Support Verb Construction* to denote any construction of the type where the meaning of the verb is bleached.[15]

1.3 Methodology

To analyze the phenomenon under investigation a brief discussion of the data is necessary. For the purpose of this study, I created a database of German SVCs resulting in a corpus of approximately 1025 SVCs from the following sources: Fischer (1978), Helbig & Buscha (1991), Ahmed (2000), and the *Digitales Wörterbuch der Deutschen Sprache* (DWDS).[16] I first entered the SVCs in random order into Excel and then ordered the SVCs according to their support verbs or their nouns (see Appendix A for an excerpt of the database). I sorted the data according to a specific verb or noun to see what verb-noun combinations exist in the corpus. In this dissertation, I limit myself to analyze only the SVCs with *geraten*.

The spreadsheet I used for my dissertation lists only SVCs with *geraten* and has 15 columns (see Figure (1.1)), each representing information about a particular aspect of an

[14]See also Harris (1970), Gross (1981, 1984), Giry-Schneider (1987), Abeillé (1988), Nohr-Pedersen (1989), Salkoff (1990), Langer (2008). For a more detailed distinction between *light verb*, *Funktionsverbgefüge* and *support verb construction* see Langer (2008).
[15] See Langer (2009) for an in-depth discussion of the difference between SVCs (support verb constructions), *FVGs* (*Funktionsverbgefüge* 'function verb constructions'), and light verbs.
[16] Digitales Wörterbuch der deutschen Sprache ('digital dictionary of the German language') at http://www.dwds.de.

SVC. The first header is a unique number identifying the SVC (SVCID), starting with "1". The second column contains the SVC as a whole unit, meaning that all parts of the SVC are included in this field and consist of least three parts: a preposition or zero (0) as placeholder; a noun; and a support verb. The third column lists any full verb counterpart. The following entry for the SVC consists of a preposition, a noun, and a support verb.

(1.20) a. in-s Elend geraten
In[PRPE]-the:ARD;N;DAT distress:SG;N get:INF
'becoming distressed'

The next eight columns in the spreadsheet are used to separate the individual elements of the SVCs into their own column. The following labels are used, in this order. REF (reflexive), PREP (preposition), DEF (definite article), INDEF (indefinite article), XFACT (X-Factor, which refers to elements which are unusual in SVCs like *jemanden/jemandem* ('someone')), NOUN (noun), VERB (support verb), and finally PostP (postposition). Using example (1.20), the SVC is divided as in (1.21).

(1.21) 0 in das 0 Elend geraten
0 to:PRPD the:ARD;DAT 0 distress:SG;N get:INF
'becoming distressed'

Ins Elend geraten does not contain a reflexive part (REF), XFACT, or PostP, which means these positions are left empty, as in Figure (1.1).

	A	B	C	D	E	F	G	H	I	J	K
1	SVCID	SVC	FULLVERB	REF	PREP	DEF	INDEF	XFACT	NOUN	VERB	POSTP
2	6	unter Abhaengigkeit geraten	0		unter				Abhaengigkeit	geraten	
3	26	in Angst geraten	aengstigen		in				Angst	geraten	
4	375	ins Elend geraten	0		in	das			Elend	geraten	
5	346	in Erregung geraten	erregen		in				Erregung	geraten	
6	823	unter Verschluss geraten	verschliessen		unter				Verschluss	geraten	
7	810	in Verwirrung geraten	verwirren		in				Verwirrung	geraten	

Figure (1.1) Screenshot of German SVCs with *geraten* in corpus

The last five columns in the spreadsheet contain example sentences illustrating usage of the SVC in context. These sentences are typically taken from the Internet using WebCorp, DWDS, or COSMAS II, which allows users to define a specific search string and will then either search the Internet (WebCorp) or use its own internal database for occurrences of the desired word or word combinations.[17] In rare cases where it was difficult to find good examples, I created examples myself and double-checked them with other native speakers to confirm their acceptability. Next, I coded each noun in the SVCs with either L(ocation), E(motion), S(ituation), or O(nset) which allowed me to sort the SVCs according to their respective sub-meanings. After I sorted the nouns into sub-meanings, I consulted four synonym dictionaries (*Duden: Das Synonymwörterbuch*; *Synonyme: Sinn- und sachverwandte Wörter*; DWDS; and *Wörterbuch Synonyme*) and extracted all the possible synonyms for each of the nouns. In addition, a corpus search of DWDS contributed usage based instances of nouns in SVCs to the list which provided me with possible noun substitutes for the analysis conducted in this dissertation. By sorting the nouns within each sub-meaning and for each noun, I was able to find general commonalities between possible replacement nouns.

[17] For more information on WebCorp, see [http://www.webcorp.org].

1.4 Structure of the dissertation

The dissertation is structured as follows: Chapter 2 surveys various analyses of SVCs in German that are more specific than von Polenz (1963) or Helbig & Buscha (1989). It begins with a discussion of the referentiality of the noun which is taken as central to the identification of SVCs in German (Helbig & Buscha 1989, Storrer 2007, Langer 2008, 2009, among others). I then discuss the semantic contribution of the verb in SVCs (von Polenz 1969, Helbig & Buscha 1989 among others) and summarize the differentiation between direct object SVCs and prepositional SVCs (Storrer 2007, Langer 2008, 2009). Finally, I provide an overview of SVCs and their BVC counterparts (Storrer 2007).

In Chapter 3, I consider the theoretical background of my dissertaion. First, I describe Frame Semantics as developed by Fillmore (1982, 1985) with a particular focus on how Frame Semantics is implemented in FrameNet, and how SVCs are treated in FrameNet (Fillmore 1982, 1985, Petruck 1996, Petruck et al. 2004, Rupenhofer et al. 2010, among others). Then, I summarize event-frame based Frame Semantics as proposed by Boas (2003), as the basis for my own analysis of SVCs with *geraten* in German.

Chapter 4 examines Goldberg's (1995) account of Construction Grammar (Fillmore & Kay 1993, Fillmore, Kay & O'Connor 1988, and Lakoff 1987), especially her analysis of the ditransitive construction. I use this discussion as a springboard for relating the meanings and the forms of SVCs to each other. This chapter also provides an analysis of

the central senses of *geraten* with an in-depth investigation of the third central sense of *geraten* as unintentional change with a motion towards a goal meaning.

In Chapter 5, I first consider the meaning of SVCs with *geraten* and then explore each of the three different sub-meanings of *geraten* as support verb in more detail. Finally, I highlight the different communicative functions and meanings of SVCs and their BVC and passive paraphrases.

In Chapter 6, I propose a modified event-based Frame Semantics account of selectional restrictions to SVCs with *geraten*. Specifically, I give an in-depth analysis of SVCs with *geraten* encoding an emotion. I use *Angst* ('fear') as an example to illustrate how selectional restrictions can be captured by the event-frame, thus allowing for the creation of novel instances of SVCs with *geraten* without generating unacceptable sentences. This discussion includes a detailed frame semantic analysis of *Angst*, including sub-categorization and substitution ability of *Angst*. The proposed event-frame is able to generate novel instances of this type of SVC. Then, I propose general restrictions on SVCs with *geraten* with the emotional sub-meaning which includes specific event-frame restrictions. I argue that emotion nouns form semantic islands and that it is possible to categorize emotion nouns both in terms of semantic islands and as forming clusters of productivity on a continuum from frozen to highly productive. The last sections of this chapter provide a brief investigation into SVCs where the noun encodes situation and onset words, respectively.

Finally, Chapter 7 presents a summary and some proposals for future research. The conclusion emerging from this work is that an analysis of SVCs with *geraten* cannot be

based on generative syntactic rules or construction level selectional restrictions in order to account for the licensing of novel SVCs with *geraten*. Instead, the relevant information that is contributed to a noun's lexical entry by some mechanism in other frameworks is already contained in one of the various conventionalized event-frames associated with a noun. This information already contained in a mini-construction associated with a given noun only needs to be activated by different semantic cues (e.g. discourse).

Chapter 2

Previous Research on Support Verb Constructions (SVCs)

2.1 Introduction

This chapter surveys previous analyses of German SVCs and describes what types of classification criteria have been proposed. This section is intended to situate this dissertation within the research undertaken on support verb constructions. All issues mentioned in this section have been the focus of discussions by other linguists (von Polenz (1963), Helbig & Buscha (1989), Storrer (2007), or Langer (2008). Section 2.2 reviews SVCs with regard to referentiality of the noun. Section 2.3 summarizes accounts regarding the semantic contribution of the verb in SVCs. In Section 2.4 I provide an overview of the distinction between direct object SVCs (e.g. *einen Auftrag erhalten* ('to receive an assignment')) and prepositional phrase SVCs (PP-SVCs) (e.g. *in Streit liegen* ('to be in a fight')). A comparison between SVCs and their full verb counterparts, so-called Base Verb Constructions (BVCs), is provided in Section 2.5.[18] Section 2.6 argues that previous approaches to SVCs do not adequately account for the selectional restrictions exhibited by SVCs, because they neglect to consider at the substitutability of the noun.

[18] I use the terms "full verb" and "base verb" interchangeably.

2.2 Referentiality of the noun in SVCs

I begin with an overview of previous analyses of the referentiality of the noun in SVCs, in order to determine whether it might help me in defining selectional restrictions for nouns in SVCs. Helbig & Buscha (1989) suggest that support verbs are used in a specific manner in a sentence, in which the predicate is not able to express the meaning itself. The authors distinguish two classes of SVCs according to the degree of lexicalization[19] of the support verb (lexicalized or non-lexicalized SVCs)[20] and argue that lexicalized SVCs have a low degree of syntactic variation and the noun is not referential, as in (2.1).[21] I will use the SVC *Gefahr laufen* ('walk into danger') in order to illustrate Helbig & Buscha's tests, i.e. I will show how all the criteria work with *Gefahr laufen*.

(2.1) a. Gefahr laufen
danger:SG;F walk:INF
'walk into danger' (Helbig & Buscha 1989: 95)

b. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'

[19] Lipka (2002: 111) defines lexicalization as "the phenomenon that a complex lexeme once coined tends to become a single complete lexical unit, a simple lexeme." Sag et al. (2001: 3), for example, argue that there are lexicalized phrases and institutionalized phrases and that "lexicalized phrases have at least partially idiosyncratic syntax or semantics, or contain 'words' which do not occur in isolation." They identify three types of lexical phrases: (1) fixed expressions, (2) semi-fixed expressions, and (3) syntactically flexible expressions where fixed expressions are the most lexicalized expressions and syntactically flexible expressions are the least lexicalized.

[20] The difference between lexicalized and non-lexicalized SVCs, according to Helbig & Buscha (1989), is that lexicalized SVCs exhibit a low degree of variability and the noun is not referential as in *in Gebrauch haben* ('to have in usage'), while non-lexicalized SVCs exhibit a high degree of variability and the noun is still referential as in *zum Abschluss bringen* ('to bring to an end').

[21] According to Helbig & Buscha (1989), if an SVC is fixed, it is also lexicalized.

Helbig & Buscha argue that *Gefahr* in (2.1) is lexicalized because the SVC fulfills all or most of the following fifteen syntactic criteria.[22]

(1) The nominal element is a de-verbal or de-adjectival noun whose stem is mostly its base verb or adjective.

(2.2) a. Er bringt die Mutter in Ärger.
he[PRON.SG.M] brings:3SG the:ARD;ACC;SG mother:SG;F in:PRPE anger:SG;M.
'He angers the mother.'

b. Er ärgert die Mutter.
he[PRON.SG.M] angers:3SG the:ARD;ACC;SG mother:SG;F.
'He angers the mother.'

Comparing *Gefahr* ('danger') in (2.1) with *Ärger* in (2.2a) the following observations can be made. *Gefahr* is not de-verbal (there is no verb **gefahren* ('*to danger')), but rather de-adjectival from *gefährlich* ('dangerous'), while *Ärger* is a de-verbalization of *ärgern* ('to anger') in (2.2b), and thus both fulfill criterion (1).

(2) In most cases it is possible to paraphrase SVCs with its full verb, as follows.

(2.3) a. Er kommt in Verlegenheit.
he[PRON.SG.M] comes:3SG in:PRPE embarrassment:SG;F
'He gets embarrassed.'

[22] The difference between lexicalized and non-lexicalized SVCs is gradual because of the increasing grammaticalization of support verbs, thus, the syntactic criteria laid out by Helbig & Buscha (1989) apply to varying degrees to the individual SVCs. In essence, there is no set boundary between lexicalized and non-lexicalized SVCs, and whether an SVC is lexicalized or not depends on the individual SVC.

b. Er wird verlegen.
he[PRON.SG.M] becomes:3SG embarrassed:INF
'He becomes embarrassed.' (Helbig & Buscha 1989: 97)

Since *Gefahr* does not have a verbal counterpart, criterion (2) is not applicable to example (2.1).

(3) The SV is generally not replaceable by a verb with similar meaning, as in (2.4), unlike full verbs, as in (2.5).

(2.4) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'
b. Der Minister *rennt /*joggt Gefahr
the[ARD.NOM.M] minister:SG;M *runns:3SG/*jogs:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'

(2.5) a. Er setzte das Kind in
he[PRON.SG.M] sat:3SG;PST the:ARD;ACC;N child:SG;N in:PRPE
den Wagen.
the:ARD;ACC;SG car:SG;M.
'He sat the child inside the car.'
b. Er legte/stellte das Kind in
he[PRON.SG.M] laid/put:3SG;PST the:ARD;ACC;N child:SG;N in:PRPE
den Wagen.
the:ARD;ACC;SG car:SG;M.
'He laid/put the child inside the car.' (Helbig & Buscha 1989: 98)

According to criterion (3), the support verb *laufen* in (2.1) is not lexicalized because it is not possible to replace it with a verb of similar meaning like *rennen* ('to run') or *joggen* ('to jog') in (2.4b).

(4) Within SVCs, the SV and the nominal elements stand in recognizable communication strings ('*Kommunikationsreihen'*).[23]

(2.6) in Abhängigkeit bringen/sein/kommen/gelangen/geraten
in[PRPE] dependency:SG;F bring/be/come/attain/get:INF
'to bring/be/come/attain/get in/into dependency'
(cf. Helbig & Buscha 1989: 98)

The example sentence in (2.1) also allows for communication strings; consider the partial listings in (2.7).

(2.7) in Gefahr bleiben/bringen/geraten/kommen/schweben/sein/laufen
in[PRPE] danger:SG;F remain/bring/get/come/hover/be/walk:INF

Example (2.1) fulfills criterion (4) regarding lexicalization.

(5) The nominal element in lexicalized SVCs cannot be anaphorized as in (2.8); however, anaphorization is possible with non-lexicalized SVCs as in (2.9), especially with the accusative.

[23] *Kommunikationsreihen* show the combinatorial ability of nouns with support verbs. In other words, nouns in SVCs select their support verbs, but not all verbs are suitable as support verbs and not all nouns select the same support verbs.

(2.8) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'

b. *Der Minister läuft sie zu
*the[ARD.NOM.M] minister:SG;M walks:3SG she:REL;PRON;SG;F to:PRPD
verlieren.
lose:INF.
'The minister is in danger of losing the election.'

c. Der Minister läuft.
the[ARD.NOM.M] minister:SG;M walks:3SG
'The minister walks.'

(2.9) a. Er nahm Verhandlungen mit dem
he[PRON.SG.M] took:3SG;PST negotiations:PL with:PRED the:ARD;SG;DAT;M
Nachbarstaat auf.
neighboringcountry:SG;M up:SPFX.
'He took up negotiations with the neighboring country.'

b. Er nahm sie auf.
he[PRON.SG.M] took:3SG;PST she:REL;PRON;SG;F up:SPFX.
'He took it up.' (Helbig & Buscha 1989: 98)

Even though (2.8b) is syntactically and semantically acceptable, the sentence does not convey the same meaning as the SVC in (2.8a), which supports Helbig & Buscha's claim that the noun in lexicalized SVCs cannot be anaphorized, i.e. *Gefahr* ('danger') cannot be replaced by the pronoun *sie* ('she').

(6) Preposition groups and accusative case in lexicalized SVCs cannot be pronominalized or adverbialized as in (2.10), which is possible with non-lexicalized SVCs, as in (2.11).

(2.10) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger to lose the election.'
b. *Wohin läuft er in Gefahr?
whereto[Q] walks:3SG he:PRON;SG;NOM in:PRPE danger:SG;F.
*'Whereto does he walk into danger.'

(2.11) a. Er setzte den Apparat auf
he[PRON;NOM;SG;M] put:3SG;PST the:ARD;ACC;M machine:SG;M on:PRPE
den Tisch.
the:ARD;ACC;M table:SG;M.
'He places the machine on the table.'
b. Wohin setzte er den
whereto[Q] placed:3SG;PST he:PRON;SG;NOM the:ARD;ACC;M
Apparat?
machine:SG;M?
'Where did he place the machine?' (Helbig & Buscha 1989: 99)

According to this criterion, *in Gefahr laufen* in example (2.1) is lexicalized since it is not possible to adverbialize it, as shown in (2.10b).

(7) The use of definite articles with nouns in lexicalized SVCs is limited to either the null article or the definite article while non-lexicalized SVCs can take different articles.

(2.12) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'
b. * Der Minister läuft eine Gefahr
*the[ARD.NOM.M] minister:SG;M walks:3SG a:ARI;SG;ACC;F danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing an election.'

If *Gefahr laufen* is a non-lexicalized SVC, then the use of the indefinite article (*eine* ('a/an')), should be acceptable. However, as (2.12b) shows, adding an indefinite article renders the sentence infelicitous. Replacing the indefinite article with the definite article *die* ('the') produces an acceptable sentence. Based on criterion (7) and the inability to use the indefinite article, *Gefahr laufen* must be lexicalized.

(8) In lexicalized SVCs the noun can (often) not be pluralized.

(2.13) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'

b. *Der Minister läuft Gefahren
the[ARD.NOM.M] minister:SG;M walks:3SG dangers:PL
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'

Observe the opposition between the acceptable sentence in (2.13a) with the singular form of *Gefahr* ('danger') and the unacceptable sentence with plural *Gefahren* ('dangers') in (2.13b). Since *Gefahr* is lexicalized, pluralization is not allowed. Non-lexicalized nouns in SVCs as in *in die Diskussion geraten* ('to get into the/a discussion') can be pluralized to *in die Diskussionen geraten* ('to get into discussions').

(9) Nouns in lexicalized SVCs do not allow for the addition of an attributive sentence with a relative pronoun, while non-lexicalized SVCs in general allow for a relative sentence to be added, as the following example shows.

(2.14) *die Gefahr, die er
*the[ARD.NOM.SG.F] danger:SG;F, the:REL.PRON.NOM.F he:NOM.M
gelaufen ist.
walked:PST;PTCP is:3SG.
'The danger into which he walked.' (Helbig & Buscha 1989: 99)

(10) Nouns in lexicalized SVCs do not allow for modification by adjectival attributes as in (2.15a), while non-lexicalized SVCs allow the insertion of different attributes as in (2.15b). While some SVCs contain an obligatory attribute (e.g. *Die Versammlung nahm einen *( )/günstigen Verlauf* ('the meeting took a *( )/favorable course') (Helbig & Buscha (1989: 100))), other SVCs have reached such a high degree of lexicalization that the preposition and noun are written together (e.g. *zugrunde richten* ('to ruin') or *zutage treten* ('to appear') (Helbig & Buscha (1989: 100))) and therefore prohibit attribution.

(2.15) a. *Der Betriebsleiter nimmt von den
the[ARD.SG.M] manager:SG;M takes:3SG of:PRPD the:ARD;DAT;PL
Beschlüssen schnelle Kenntnis.
decisions:PL fast:ADJ;SG;ACC;F notice:SG;F.
'*The manager takes quick notice of the decisions.'
b. Er bringt uns in
he[PERS.PRON.3SG] brings:3SG us:PERS;PRON;DAT;1PL in:PRPE
tüchtige (schreckliche) Verlegenheit.
brave:ADJ;SG;ACC;F (terrible:ADJ;SG;ACC;F) embarrassment:SG;F.
'He embarrasses us terribly.' (Helbig & Buscha 1989: 100)

Since it is possible to modify the SVC *Gefahr laufen* (‘walk into danger’), as shown in (2.16), example (2.1) is a non-lexicalized SVC according to criterion (10).

(2.16) Der Minister läuft grosse Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG great:ADJ;SG;ACC;F danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
‘The minister is in danger of losing the election.’

(11) Lexicalized SVCs can only be negated with *nicht* (‘not’), as (2.17) shows.

(2.17) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
‘The minister is in danger of losing the election.’
b. Der Minister läuft nicht/keine Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG not/no:NEG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
‘The minister is not in danger of losing the election.’

Here *keine* (‘no’) is also a possible negation, which means that according to this criterion the example in (2.17) is non-lexicalized.

(12) Not all SVCs with accusative can be passivized.

(2.18) a. Die Herstellungstechnik erfuhr
the[ARD.NOM.F] production technique:SG;F experienced:3SG;PST
eine Vereinfachung.
a:ARI;ACC;SG;F simplification:SG;F.
'The production technique is simplified.'

b. *Eine Vereinfachung wurde von der
a[ARI.NOM.F] simplification:SG;F was:3SG;PST of:PRPD the:ARD;SG;DAT;F
Herstellungstechnik erfahren.
production technique:SG;F experienced:INF.
'A simplification was experienced by the production technique.'

Criterion (12) is not applicable to example (2.1), even though it is an accusative SVC, because *laufen* ('to walk') is an intransitive verb.[24]

(13) It is not possible to separate the nominal element and the SV with the negation *nicht* ('not'), as in (2.19a).

(2.19) a. *Der Minister sagte, dass er
the[ARD.NOM.M] minister:SG;M said:3SG;PTS that:CONJ he:SG;NOM;M
Gefahr nicht läuft die Wahl zu verlieren.
danger:SG;F not:NEG walks:3SG the:ARD;F election:SG;F to:PRPD lose:INF.
'The minister said that he is not in danger of losing the election.'

b. Der Minister sagte, dass er
the[ARD.NOM.M] minister:SG;M said:3SG;PTS that:CONJ he:SG;NOM;M
nicht Gefahr läuft die Wahl zu verlieren.
not:NEG danger:SG;F walks:3SG the:ARD;F election:SG;F to:PRPD lose:INF.
'The minister said that he is not in danger of losing the election.'

[24] Helbig & Buscha do not give any reasons why some accusative SVCs are not passivizable other than that the change from full verb + accusative object to SVC is a fluid one and cannot be measured. German, similar to English, has an impersonal passive in which intransitive verbs can be passivized by eliminating the subject and replacing it with a 'dummy' *es* ('it'). For example, the active sentence *Die Kinder laufen* ('The children walk/run') can be passivized as *Es wird gelaufen* ('Someone is walking/running').

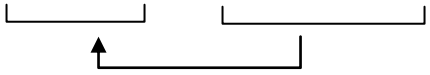
(14) The nominal element in SVCs is obligatory; eliminating it leads to a change in meaning or acceptability.

(2.20) a. Der Minister läuft Gefahr
the[ARD.NOM.M] minister:SG;M walks:3SG danger:SG;F
die Wahl zu verlieren.
the:ARD;ACC;SG election:SG;F to:PRPD lose:INF.
'The minister is in danger of losing the election.'

b. *Der Minister läuft die Wahl
the[ARD.NOM.M] minister:SG;M walks:3SG the:ARD;ACC;SG election:SG;F
zu verlieren.
to:PRPD lose:INF.
'The minister is in danger of losing the election.'

(15) Other objects or adverbials in SVCs are not dependent on the SV but rather on the nominal element (accusative, preposition groups), which are the carriers of the lexical meaning.[25]

(2.21) Wir *nehmen* Einfluss auf seine Entwicklung.



(Helbig & Buscha 1989: 102)

Wir nehmen Einfluss auf seine
we[PRON.NOM.PL] take:1PL influence:SG;F on:PRPE his:PRON;POSS;ACC;M
Entwicklung.
development:SG;F.
'We influence his development.'

[25] Lexical meaning (or word meaning), as compared to sentence meaning, refers to the meaning an individual word carries.

Consider sentence (2.21), which illustrates the dependency of other objects or adverbials i.e. *auf seine Entwicklung* ('on his development') on the nominal element *Einfluss* ('influence'). *Einfluss nehmen* ('to have influence') in (2.21) is an accusative SVC in which the nominal element (*Einfluss*) is the meaning carrier of the sentence. *Auf seine Entwicklung* ('on his development') is not dependent on the support verb since there is no literal taking of the development but rather an influencing. Therefore, it is not the SV *nehmen*, instead the noun *Einfluss* that licenses *auf seine Entwicklung*.

Helbig & Buscha (1989) argue that the degrees of lexicalization and referentiality, i.e. the ability to refer to an actual object, are inversely proportional; therefore when the noun in SVCs is referential, then the SVC is not yet lexicalized, but when the noun is non-referential then the SVC is lexicalized. Consider again *Gefahr* ('danger') in (2.1), which is lexicalized and therefore non-referential. This means that *Gefahr*, in this SVC, does not refer to any concrete actual danger, since the danger one 'walks into' can be interpreted as either non-literal or metaphorical. In contrast, non-lexicalized SVCs as in (2.22) have a high degree of syntactic variability and contain a referential noun.

(2.22) a. (die /eine) Verhandlung aufnehmen
(the[ARD.NOM.F]/a[ARI.NOM.F]) trial:SG;F up:SPFX-pick:INF.
'start of (the/a) trial' (Helbig & Buscha 1989: 95)

b. Das Gericht nimmt die Verhandlung
the[ARD.NOM.N] court:SG;N takes:3SG the:ARI;SG;F trial:SG;F
gegen die Mörder auf.
against:ADV the:ARD;PL murderers:PL up:SPFX.
'The trial against the murderers begins.'

As mentioned above, Helbig & Buscha (1989: 95) do not provide information about the precise boundary between lexicalized and non-lexicalized SVCs, nor about the degrees of syntactic variability, both of which have fluid boundaries.[26] The SVC *eine Verhandlung aufnehmen* ('to start a trial') in (2.22) is not lexicalized because it only fulfills a minimal number of the criteria summarized above for syntactic variability. *Verhandlung* is referential because it refers to the actual trial of the murderer. Helbig & Buscha argue that the difference between (2.1) and (2.22) lies in their degree of grammaticalization and lexicalization. They note that this is why syntactic characteristics of SVCs apply to different degrees to individual SVCs: the degree of grammaticalization/lexicalization varies with different SVCs. While the criteria provided by Helbig & Buscha are a good starting point for the classification of SVCs, the lack of boundary guidelines leads to arbitrariness in deciding which SVCs are lexicalized or not. In other words, the question of where lexicalization begins can be set at an arbitrary number. Additionally, the criteria do not provide insights into the selectional restrictions of nouns since they are mostly geared towards examining syntactic variability in SVCs. With this overview of Helbig & Buscha's treatment of referentiality in SVCs in hand, I now discuss Storrer's (2007) analysis of referentiality.

[26] "Zwischen den Gruppen (1) [lexical SVCs] and (2) [non-lexical SVCs] besteht lediglich ein gradueller Unterschied. Er wird bedingt durch die sprachliche Entwicklung, d. h. durch den Prozess der zunehmenden *Grammatikalisierung* der FV […]. Dies ist auch der Grund dafür, weshalb die syntaktischen Kriteren für FV in unterschiedlichem Masse auf die einzelnen Fälle zutreffen. […]" (Helbig & Buscha 1989: 95). ('Between the groups (1) [lexical SVCs] and (2) [non-lexicalized SVCs] exists only a gradual difference which is conditional on linguistic development, i.e., the process of increased grammaticalization of SV […]. This is also the reason why the syntactic criteria apply to SVs to different degrees. […] (Helbig & Buscha 1989: 95) My translation).

Storrer (2007) distinguishes between D(irect) O(bject)-SVCs (DO-SVCs) and P(repositional) P(hrase)-SVCs (PP-SVCs), respectively. Direct Object-SVCs contain a direct object as in (2.23).

(2.23) Der Professor **findet** grosse **Anerkennung** in seinem Forschungsfeld.
The[NOM.ARD.M] professor:SG;M finds:3SG great:ADJ;SG;ACC recognition:SG;F in:PRPE his:PRON;3SG;DAT;M research field:SG;N.
'The professor enjoys great recognition in his field of research.'

Prepositional phrase SVCs, or PP-SVCs, contain a preposition as shown in (2.24).

(2.24) Der Akrobat **hält** die Zuschauer **in** **Atem**.
The[NOM.ARD.M] acrobat:SG;M holds:3SG the:ARD;ACC;PL spectators:PL in:PRPE breath:SG;M.
'The acrobat keeps the spectators in suspense.'

According to Storrer, PP-SVCs contain a preposition (e.g. *in Atem halten*, *in Rage geraten*) while DO-SVCs do not (e.g. *Folge leisten*, *Annerkenung finden*). DO-SVCs and PP-SVCs come in three different 'sub-classes', i.e. (1) idiomatic or lexicalized SVCs,[27] (2) semi-compositional SVCs, and (3) highly lexicalized SVCs. The term "idiomatic SVC" is used by Storrer to describe SVCs that cannot be analyzed semi-compositionally because the meaning of the SVC is assigned to the construction as a whole (i.e. they are lexicalized), as in *Folge leisten* ('to follow suit'). Semi-compositional SVCs are used to

[27] Storrer (2007) borrows the term "idiomatic SVC" from Ahmed (2000: 68ff) & Seifert (2004: 61ff).

describe SVCs like *Peter trifft eine Entscheidung* ('Peter makes a decision') in that the meaning is characterized as being composed of the PredN[28] (*Entscheidung*) and the semantically reduced support verb (*treffen*). Finally, highly lexicalized SVCs are SVCs which fall somewhere between idiomatic SVCs and semi-compositional SVCs. DO-SVCs as well as PP-SVCs can be idiomatic, highly lexicalized, or semi-compositional.[29]

Storrer analyzes referentiality through a case study of idiomatic SVCs. Observe the following two expressions which are members of the idiomatic SVC class.

(2.25) a. Autofahrer müssen den Aufforderungen
car drivers[NOM.PL] must:AUX;3PL the:ARD;ACC;PL requests:PL
der Polizei **Folge** **leisten**.
the:ARD;DAT;SG police:sg sequence:SG;F accomplish:INF.
'Drivers must obey requests made by the police.'

b. Die Frau **kommt** **/gerät** mit
the[ARD.NOM.SG.F] woman:SG;F comes:3SG/gets:3SG with:PRPD
der Ratenzahlung **in** **Verzug**.
the:ARD;DAT;SG;F installment:SG;F in:PRPE delay:SG;M.
'The woman gets delayed with the payment of the installment.'

Example (2.25a) is classified as a DO-SVC because the PredN (*Folge*) is the head noun of the direct object. Example (2.25b) is considered a PP-SVC because the PredN (*Verzug*) is part of a prepositional phrase. One aspect of idiomatic SVCs, according to Storrer, is that their morphosyntactic flexibility is very limited, however, there is a difference between DO-SVCs and PP-SVCs. The following table, adapted from Storrer

[28] A predicate noun (PredN) expresses a description or identity of the subject.
[29] For a discussion of compositionality see Sag et al. (2001) among others.

(2007: 173), summarizes her findings regarding the morphosyntactic flexibility of idiomatic DO-SVCs and PP-SVCs.

	hits	inst	definite article	indef article	kein	adjectival modifier	relative clause	anaphoric pronoun
Folge leisten	387	297	0	1 (.34%)	12 (4.04%)	2 (.67%)	0	0
in Verzug geraten	13	13	0	0	0	0	0	0

Table (2.1) Morphosyntactic flexibility of idiomatic SVCs

Storrer claims that idiomatic SVCs reveal all the characteristic restrictions of non-referentiality because their meanings are assigned to the whole construction. She argues that lexicalized (idiomatic) DO-SVCs like *Folge leisten* ('to follow suit') are less restricted than PP-SVCs as *in Verzug geraten* ('to get delayed') because her corpus study revealed that the lexicalized SVC (*Folge leisten*) shows slightly more morphosyntactic flexibility. First, *Folge leisten* allows for indefinite article variation, even though she only found one instance. Second, Storrer found twelve (12) instances of modification with *kein* ('no'). Finally, two (2) instances were modified by an adjective. The PP-SVC in *Verzug geraten* does not exhibit any morphosyntactic flexibility. Storrer argues that in cases where the PredN is not used referentially, the construction type is not as relevant. Furthermore, PredNs in idiomatic SVCs are rarely modified by adjectives as opposed to semi-compositional PP-SVCs. These findings lead Storrer to conclude that restrictions in

non-idiomatic SVCs cannot be accounted for by the same properties as those of idiomatic SVCs.

Storrer's results suggest that at least two factors interact with each other with regard to morphosyntactic flexibility, namely the referentiality of the PredN, and the type of construction in which it occurs. Idiomatic and highly lexicalized SVCs show all types of restrictions, that are traditionally associated with non-compositional verb-noun collocations, such as *kick the bucket*. Storrer's data indicate that only *Folge leisten* ('to obey') shows morphosyntactic flexibility, either with an indefinite article (1 instance), the determiner *kein-* ('no') (12 instances), or with an adjective (2 instances). She argues that because PP-SVCs like *in Abrede stellen* ('to deny'), *in Verzug geraten* ('to get delayed'), and *in Verzug kommen* ('to get delayed') show absolutely no morphosyntactic flexibility they are idiomatic. Storrer conducts a thorough corpus investigation of German SVCs that sheds lights on the morphosyntactic flexibility of idiomatic SVCs (for a discussion of idiomatic expressions, see also Nunberg et al. (1994), Winhart (2002), Fellbaum (2006), and Langer (2009), among others); however, her results do not indicate what type of selectional restrictions apply to the PredN in SVCs.

Langer's (2008) analysis of SVCs distinguishes different types of verb-noun constructions that fall between fully compositional constructions on the one hand and fully frozen constructions on the other. He differentiates between these constructions in order to tease out linguistic criteria that distinguish prototypical SVCs from other types of verb-noun constructions that are not fully compositional. To this end, he divides SVCs into two subtypes. The first consists of a verb and a referential noun, which he terms

nominal SVCs (e.g. *Peter läuft Gefahr die Wahl zu verlieren* ('Peter runs the risk of losing the election')). The second subtype, adverbial SVCs, are semi-lexicalized PPs and are disregarded in Langer's discussion. Langer proposes various linguistic tests that can be used to distinguish semi-compositional SVCs from compositional verb-object expressions, and lexicalized SVCs from idiomatic expressions.[30] These tests establish (1) referentiality, (2) semantic reduction of the SV (support verb), (3) compositionality, and (4) status of complements. He only considers nominal SVCs, which means that his tests are geared towards classifying verb-noun constructions where the noun is referential. In order to determine referentiality of the NP, Langer (2008) proposes four major tests, each containing several sub-tests. I only focus on the tests that may help establish whether a construction is an SVC (in order to exclude idioms) or help determine selectional restrictions of SVCs.

The following tests help to determine the referentiality of the NP, according to Langer: (1) The anaphor-test, more precisely, the instances where (a) the NP is inside the SVC and the pronoun is outside, and (b) the NP is outside the SVC and the pronoun is inside; and (2) variability of the noun phrase with the following sub-tests: (a) article variability and (b) number variability. Referentiality tests, according to Langer (2008), are useful in distinguishing between nominal SVCs, adverbial SVCs, and idioms.

Langer proposes two tests to investigate the ability for pronominalization of the NP, which are useful for determining whether nominal SVCs[31] are idioms, since neither

[30] For a list of all the tests see Langer (2008, 2009).
[31] Storrer (2007) labels this type of SVC a DO-SVC.

idioms nor adverbial SVCs[32] allow for pronominalization of the noun phrase. The first test for pronominalization looks at SVCs where the pronoun is located outside of the SVC, as in (2.26)

(2.26) a. Liegt der Kurs,
lays[3SG] the:ARD;NOM;SG;M exchange rate:SG;M
a-m Verfallstag unter
on:PRPE-the:ARD;SG;DAT;M date of maturity:SG;M below:ADV
CHF 3.085,00 *erleidet* er
Swiss Francs 3.085,00:NBR;CARD incurs:3SG he:PRON;NOM;SG;M
einen Verlust, **der** auf
a:ARI;SG;ACC;M loss:SG;M, the:REL;PRON;NOM;SG;M at:PRPE
maximal 85 CHF begrenzt ist.
maximal:ADV Swiss Francs 85:NBR;CARD limited:PST;PTCP is:3SG.
'If the exchange rate at the date of maturity is below CHF 3,085.00, he will take a loss, which is limited to a maximum of CHF 85.'

b. *Der Reaktor *geht* ***in Betrieb***,
the[ARD.NOM.M] reactor:SG;M goes:3SG in:PRPE use:SG;M,
der einen Tag andauern wird.
the:REL;PRON;NOM;M a:ARI;ACC;SG;M day:SG;M last:INF will:AUX;3SG.
*'The reactor goes online, which will last for a day.'

c. *Er wäscht ihm den
he[PRON.NOM.M] washes:3SG him:PRON;3SG;DAT;M the:ARD;ACC;SG;M
Kopf, der…
head:SG;M, the:REL;PRON;M…
*'He washes him the head, that…' (Langer 2008: 155 & 156)

The SVCs in (2.26) are in italics (*einen Verlust erleiden* ('to take a loss') or *in Betrieb gehen* ('to become operational')). In (2.26a) the noun of the SVC *Verlust* ('loss') can be pronominalized, in this case with the relative pronoun *der*, and still be grammatical. Example (2.26b) illustrates that pronominalization of the noun in adverbial SVCs leads to

[32] Storrer (2007) labels this type of SVC a PP-SVC.

unacceptability. Similarly, if the noun *Kopf* ('head') in the idiomatic SVC in (2.26c) is pronominalized, the sentence becomes unacceptable. In other words, the NP in adverbial SVCs and non-compositional idioms cannot be the antecedent of a pronoun that is outside of the SVC. Based on this test, it is possible to determine whether a DO-SVC is an idiom, which is useful for Langer (2008) since idiomatic expressions are not part of his investigation.[33]

Consider the idiomatic expression in (2.27). At first glance, it contains all the elements of a regular SVC, and thus could be interpreted as such. However, the idiom in (2.27a) contains the preposition *auf* ('on'), which would make it an adverbial SVC. However, adverbial SVCs do not allow pronominalization of the noun, hence the unacceptability of (2.27b).

(2.27) a. Der alte Mann kommt auf
the[ARD.NOM.SG.M] old:ADJ;NOM;M man:SG;M comes:3SG on:PRPE
die Beine.
the:ARD;PL legs:pl.
'The old man gets back on his feet.'

b. * Der alte Mann kommt auf
the[ARD.NOM.SG.M] old:ADJ;NOM;M man:SG;M comes:3SG on:PRPE
die Beine, die…
the:ARD;PL legs:pl, the:REL;PRON;PL…
'The old man gets back on his feet, which…'

As (2.26) shows, it is not possible to pronominalize the noun when the noun is inside the SVC. Similarly, the second tests investigates whether pronominalization of the noun in

[33] It is possible that the lack for pronominalization may be due to it being a relative pronoun, however, it may be different if it is a personal or reflexive pronoun.

nominal SVCs is possible when the pronoun is inside of the SVC, as in (2.28a). The SVC is italicized (*Kritik übt*) and the pronoun replacing the noun and the noun are indicated in bold face (**Kritik, die**).

(2.28) a. Damit würde zugleich der
with it[ADV] would:AUX additionally:ADV the:ARD;SG;GEN;F
Kritik, **die** der Verfasser
critique:SG;M, the:ARD;ACC;SG;M the:ARD;NOM;M author:SG;M
dieser Diplomarbeit an der
of this:DEM;PRON;SG;DAT;F thesis:SG;F on:PRPE the:ARD;SG;DAT;F
bisherigen Verbändevereinbarung *übt*,
previous:ADJ;SG;DAT;F associations agreement:SG;F exercises:3SG,
die Spitze genommen.
the:ARD;SG;F tip:SG;F taken:PST;PTCP.
'At the same time, the critique exercised by the author of this thesis about the existing agreement of the association would be greatly reduced.'

b. *Die Katze, **die** er aus
the[ARD.NOM.F] cat:SG;F, the:PRON;ACC;F he:PERS;PRON;SG;M out of:PRPD
dem Sack liess.
the:ARD;SG;DAT;M bag:SG;M let:3SG;PST.
*'The cat, which he let out of the bag.' (Langer 2008: 156 & 157)

Unlike (2.28a) the NP *die Katze* ('the cat') in (2.28b) cannot be referred to with a pronoun – in this case a relative pronoun – because the noun in idiomatic expressions is never referential, according to Langer. He claims that the noun must be present in order for the sentence to be interpreted correctly, because the noun is the carrier of the predication as well as the semantic valence of the SVC.

Example (2.29a) shows an idiomatic expression without a preposition.[34] Assuming that this expression is mistaken for a nominal SVC, i.e. an SVC without a preposition, it

[34] *Den Löffel abgeben*, literally 'to turn in the spoon', is an idiomatic expression for dying.

is possible to determine whether this expression is a nominal SVC or an idiom. Since (2.29b) is only correct in a re-motivated reading, namely that the old man found a spoon and brought it to a lost-and-found, it can be concluded that (2.29a) is an idiomatic expression.

(2.29) a. Der alte Mann gibt den
the[ARD;NOM;M] old:ADJ;NOM;M man:SG;M gives:3SG the:ARD;ACC;M
Löffel ab.
spoon:SG;M off:SPFX.
'The man dies.'

b. Der alte Mann gibt den
the[ARD;NOM;M] old:ADJ;NOM;M man:SG;M gives:3SG the:ARD;ACC;M
Löffel, den er gefunden
spoon:SG;M, the:REL;PRON;SG;ACC;M he:PERS;PRON;SG;M found:PST;PTCP
hat, ab.
has:3SG, off:SPFX.
'The old man turns in the spoon, which he has found.'

These two tests are useful insofar that they can differentiate between nominal SVCs and idiomatic expressions. Unfortunately, the tests are only applicable to idiomatic expressions, which look like SVCs without prepositions (i.e. nominal SVCs). Since adverbial SVCs (PP-SVCs) never allow for pronominalization, they do not constitute a problem for my investigation into selectional restrictions in SVCs.

Next, I discuss Langer's (2008) three sub-tests dealing with the variability of the noun phrase. Langer argues that variability of the noun phrase can establish the referentiality of the NP. Based on the different variability of the determiner in the NP Langer claims that this first sub-test is useful in distinguishing nominal SVCs from

adverbial SVCs and idioms. That is, the use of determiner in nominal SVCs is not completely fixed, in most cases even articles can be selected freely, as shown in (2.30).

(2.30) a. Er begeht **einen** aufsehenerregenden
he[PRON.NOM.SG.M] commits:3SG a:ARI;ACC;M sensational:ADJ;ACC;M
Mord.
murder:SG;M.
'He commits a sensational/spectacular murder.'

b. Er beging **den**
he[PRON.NOM.SG.M] commited:3SG;PST the:ARD;ACC;M
aufsehenerregendsten Mord des
most sensational:ADJ;SUP;ACC;M murder:SG;M of the:ARD;GEN;SG;M
20. Jahrhunderts.
20th century:SG;N.
'He committed the most sensational murder of the 20th century.'
(Langer 2008: 159)

The indefinite determiner *einen* ('a') in (2.30a) and the definite article *den* ('the') in (2.30b) are freely interchangeable with no loss of meaning of the SVC *einen Mord begehen* ('to commit (a) murder').[35] Example (2.30) clearly shows that nominal SVCs are flexible with regards to determiner selection. This first sub-test is useful in distinguishing nominal SVCs from adverbial SVCs and idioms.

The second sub-test in support of Langer's claim that idioms are fixed in determiner variation, looks at an idiomatic expression as in (2.31a), where article variation is in most cases prohibited, and at adverbial SVC as in (2.31b), where article variability is either not permitted or highly restricted.

[35] Whether the adjective *aufsehenerregend* is in the positive, as in (2.30a) or in the superlative form *aufsehenerregendsten* ('most sensational') in (2.30b) does not influce the use of the indefinite or definte article. The use of the superlative does, however, change the meaning slightly.

(2.31) a. *Er liest ihm Leviten.
he[PRON.NOM.M] reads:3SG him:PRON;SG;DAT;M ‘talking-to’:PL.
*‘He gives him a talking-to.’
b. *Die Anlage geht in einen
the[ARD.SG.F] machine:SG;F goes:3SG in:PRPE a:ARI;ACC;M
Betrieb.
operation:SG;M.
*‘The machine goes into operation.’ (Langer 2008: 159)

Langer argues that the use of articles depends on the construction, i.e. article removal is prohibited as shown in (2.31a) or greatly restricted as in the case of the adverbial SVC in (2.31b). Because the idiomatic expression in (2.31a) is missing the definite article *die* (‘the’), the idiom is unacceptable. In (2.31b), the addition of the indefinite article *einen* (‘a’) causes this SVC to be unacceptable. In idiomatic expressions, the removal of required elements and the insertion of a quantifier in some adverbial SVCs leads to unacceptability, thus supporting Langer’s argument that idiomatic and adverbial SVCs either prohibit modification or are highly restricted (shown by the second sub-test above). Unfortunately, Langer does not explicitly state which article is restricted from participating in the adverbial SVC. Consider the acceptable adverbial SVC in (2.32) as a possible counter-example to Langer’s second sub-test.

(2.32) a. Die Anlage geht in Betrieb.
the[ARD.SG.F] machine:SG;F goes:3SG in:PRPE operation:SG;M.
‘The machine goes into operation.’
b. Die Anlage geht in den
the[ARD.SG.F] machine:SG;F goes:3SG in:PRPE the:ARD;ACC;M
Betrieb.
operation:SG;M.
‘The machine goes into operation.’

Example (2.32b) is similar to the SVC in (2.31b), with the only difference being that the definite article is used instead of the indefinite article. Using the definite article keeps the adverbial SVC acceptable, though it changes the meaning. The meaning difference between (2.32a) and (2.32b) is that in the (a) sentence the machine goes into operation while in the (b) sentence the machine is being moved to a specific factory. Such a motion reading is also possible for Langer's example (2.31b) in which the machine is moved to a non-specific factory due to the use of the indefinite article *eine* ('a/an'). Nevertheless, if we follow Langer's argument that adverbial SVCs either prohibit or highly restrict modification then (2.33b) should be unacceptable because it follows the example of (2.31b).

(2.33) a. Der Mann geriet in Diskussion.
the[ARD.M] man:SG;M got:3SG;PST in:PRPE discussion:SG;F.
'The man ended up in discussion'

b. Der Mann geriet in eine Diskussion.
the[ARD.M] man:SG;M got:3SG;PST in:PRPE a:ARI;ACC;F discussion:SG;F.
'The man got into a discussion.'

c. Der Mann geriet in die
the[ARD.M] man:SG;M got:3SG;PST in:PRPE the:ARD;ACC;F
Diskussion.
discussion:SG;F.
'The man got into the discussion.'

Examples (2.33b) and (2.33c) are acceptable adverbial SVCs even though they freely change the determiner. Determiner variability, as previously described, is useful in establishing whether an expression is an SVC or an idiom. Since idiomatic expressions are frozen the removal of the article causes loss of meaning, as in (2.31a). However, as I

have shown, distinguishing adverbial SVCs from nominal SVCs cannot be based solely on article variability.

The final sub-test proposed by Langer to determine referentiality of the noun in SVCs is the ability of non-lexicalized SVCs to replace singular and plural nouns in the NP in SVCs as shown in (2.34). In (2.34a), the noun *Forderung* ('demand') is in the singular and in (2.34b), the noun *Forderungen* ('demands') appears in the plural form.

(2.34) a. Er stellte eine Forderung.
he[PRON.SG.M] puts:3SG.PST a:ARI;ACC;F demand:SG;F.
'He makes a demand.'
b. Er stellte mehrere Forderungen.
he[PRON.SG.M] puts:3SG.PST several:ADJ;ACC;F demands:PL.
'He makes several demands.' (adapted from Langer 2008: 163)

Langer argues that nouns in SVCs cannot change number if the noun also does not allow for pluralization in constructions other than SVCs, as (2.35) shows. This means that the number restriction imposed on the noun in SVCs is also applicable to nouns with the same meaning in other constructions.

(2.35) a. *Er übte Kritiken an Schröder.
he[PRON.SG.M] excercised:3SG;PST critiques:PL on:PRPE Schröder.
'He passed criticism on Schröder.'
b. *Er wies die Kritiken an Beckstein zurück.
he[PRON.SG.M] rejected:3SG;PST the:ARD;ACC;PL critiques:PL on:PRPE Beckstein zurück.
Beckstein back:SPFX.
'He rejected the criticisms of Beckstein.' (Langer 2008: 164)

Langer (2008) argues that example (2.35a) is unacceptable because *Kritiken* ('criticisms') is not used in the plural form in SVCs and (2.35b) is unacceptable because *Kritiken* ('criticisms') is not acceptable in non-SVCs. Furthermore, Langer claims that the noun of adverbial SVCs and idioms can never be pluralized. The sentences in (2.36) support Langer's argument regarding the restriction on number variation in adverbial SVCs. Again, the only acceptable use of the plural *Brände* ('fires') occurs in the non-SVCs in (2.36d).

(2.36) a. Das Haus geriet in Brand.
the[ARD.SG.N] house:SG;N got:3SG;PST in:PRPE fire:SG;M.
'The house caught fire.'
b. Die Häuser gerieten in Brand.
the[ARD.SG.N] houses:PL got:3PL;PST in:PRPE fire:SG;M.
'The houses caught fire.'
c. *Die Häuser gerieten in Brände.
The[ARD.SG.N] houses:PL got:3PL;PST in:PRPE fires:PL.
*'The houses caught fires.'
d. Die vielen Brände zerstörten
The[ARD.SG.N] many:ADJ;NOM;PL fires:PL destroyed:3PL;PST
den Wald.
the:ARD;ACC;SG;M forest:SG;M.
'Multiple fires destroyed the forest.'

If we follow Langer's argument that nouns in adverbial SVCs can never be pluralized, then the adverbial SVCs in (2.37a) and (2.37b) should not be acceptable.

(2.37) a. Die Minister gerieten in (eine)
the[ARD.PL] ministers:PL got:3PL;PST in:PRPE (a:ARI;ACC;SG;F)
Diskussion.
discussion:SG;F.
'The ministers ended up in (a) discussion.

b. Die Minister gerieten in (mehrere)
the[ARD.PL] ministers:PL got:3PL;PST in:PRPE (several:ADJ;ACC;PL;F)
Diskussionen.
discussions:PL;F.
'The ministers ended up in (several) discussions.

(2.38) a. Das Fernsehen übertrug die Diskussion
The[ARD.SG.F] TV:SG broadcast:3SG;PST the:ARD;F discussion:SG;F
der Minister.
the:ARD;GEN;PL ministers:PL.
'The news station broadcasted the ministers' discussion.'

b. Das Fernsehen übertrug die Diskussionen
The[ARD.SG.F] TV:SG broadcast:3SG;PST the:ARD;F discussion:PL
der Minister.
the:ARD;GEN;PL ministers:PL.
'The news station broadcasted the ministers' discussions.'

It is, however, reasonable to assume that ministers can have more than just one discussion and thus (2.37b) is, according to my grammaticality judgment, acceptable.[36] This may be because the noun is also variable outside of an SVC as shown in (2.38). This test is useful for determining whether a construction constitutes an SVC or an idiom. In addition, this test may help with determining which nouns are allowed to replace the noun in the original SVC, i.e., it may be possible to exclude certain forms of near synonyms based on their number. Consider (2.39), where (a) indicates an SVC with a singular noun and possible replacement nouns, and where plural forms of the nouns are not acceptable substitutes. Similarly, the examples in (b) illustrate that plural nouns may not take near meaning equivalent singular nouns as replacements.

[36] A parallel example would be to replace the singular noun *Diskussion* ('discussion') in (2.37a) with *Not* ('distress') and the plural *Diskussionen* in (2.37b) with the plural *Nöte*.

(2.39) a. Die Frau gerät in Unruhe /*Unruhen.
the[ARD.SG.F] woman:SG;F got:3SG in:PRPE agitation:SG;F/*agitations:PL.
'The woman became agitated.'

Erregung/*Erregungen
'excitement/*excitements'
Aufregung/*Aufregungen
'agitation/*agitations'
Hysterie/*Hysterien
'hysteria/*hysterias'

b. Der Mann geriet in Schulden/*Schuld.
The[ARD.SG.M] man:SG;M got:2SG;PST in:PRPE debt:PL /*debt:SG.
'The man ended up in debt.'

Verbindlichkeiten/*?Verbindlichkeit
'debts/*debt'

As these examples show, selectional restrictions regarding nouns may be influenced by the availability of either a singular or plural version of the substitute noun; i.e. a noun that only occurs in the plural may not be acceptable as a replacement for a noun in the singular. This means that number variation substitutability requires a case by case analysis of possible substitute nouns.

Langer's tests regarding referentiality of the predicate noun show that semi-compositional support verb constructions, compositional verb-object expressions, lexicalized SVCs, and idiomatic expressions, do not follow a predictable pattern. This means that different SVCs allow for different modifications regarding referentiality of the noun. It also shows that these modifications are not always helpful for distinguishing semi-compositional SVCs from compositional verb-object expressions or lexicalized SVCs and idiomatic expressions.

In this section, I summarized previous attempts at categorizing the referentiality of nouns in SVCs. These prior analyses show that nouns in lexicalized SVCs are less referential than nouns in non-lexicalized SVCs. Storrer, for example, argues that non-referentiality is associated with idiomatic or highly lexicalized SVCs because these types of SVCs are not compositional. Referentiality, or lack thereof, can indicate whether an SVC is lexicalized, but referentiality cannot account for the fact that certain nouns are not acceptable substitutes even though they are classified as synonyms or near-synonyms (e.g. *Brand* ('fire')/*Feuer* ('fire')) as in *Das Haus gerät in Brand* ('The house catches fire')/**Das Haus gerät in Feuer* ('The house catches fire') in which both *Feuer* and *Brand* are referential but cannot replace each other in an SVC without a significant shift in meaning.[37] If lexicalization constitutes a loss of referentiality, then lexicalized SVCs like *in Brand geraten* ('to catch fire') have no or very little referentiality. However, *Brand* seems to refer to a concrete event in reality, thus, even nouns in lexicalized SVCs may be referential. The tests presented by Langer are to a certain degree helpful in distinguishing SVCs from idioms, but they are less helpful in determining the selectional restrictions imposed on the noun in SVCs.

Having discussed previous analyses of referentiality in SVCs, I now take a closer look at previous research concerning the semantic contribution of the verb in SVCs to show that the support verb, though semantically reduced, contributes essential semantic information to the expressive power of SVCs. The next chapter will show that this information is necessary for the understanding of the communicative functions of SVCs.

[37] I discuss *Brand* and *Feuer* in more detail in Chapter 6.

2.3 Semantic contribution of the support verb in SVCs

Von Polenz (1963) claims that SVCs fulfill a specific linguistic function, namely that they are better suited to express a given situation than their base verb constructions (BVCs). In this section, I review the different analyses proposed for the semantic status of the support verb. Compare the following examples:

(2.40) a. Claudia bringt die Kreide zu-r
Claudia brings:3SG the:ARD;ACC;F chalk:SG;F to:PRPD-the:ARD;SG;DAT;F
Tafel.
black board:SG;F.
'Claudia brings the chalk to the blackboard.'

b. Claudia bringt das Stück zu-r
Claudia brings:3SG the:ARD;ACC;N piece:SG;N to:PRPD-the:ARD;SG;DAT;F
Aufführung.
performance:SG;F.
'Claudia brings the play to the stage.' (Helbig & Buscha 1989: 80)

Examples (2.40a) and (2.40b) do not express the same meaning, as the former expresses a change in location, which is encoded in the full verb *bringen* ('to bring'), while in (2.40b) the verb *bringen* ('to bring') does not encode such a change in location, but rather a different sense. In essence, *bringen* in (2.40b) is reduced in meaning, as compared to the full verb in (2.40a).[38] Since the verb loses some of its meaning and becomes semantically "empty" or "bleached", the following question arises: what meaning, if any, does the support verb contribute to the construction?

[38] In (2.40b) the prepositional phrase contributes the meaning of the sentence.

To understand this issue more clearly, I give a brief overview of different aspects of the semantic contribution of the support verb (SV) in SVCs. Because SVs potentially influence *Aktionsart*[39] they also influence how a situation is perceived which in turn influences how one communicates the situation. The question in which I am interested is whether a change in the *Aktionsart* caused by the support verb also has an influence on the selectional restrictions of the noun in SVCs. I begin my discussion with the role of *Aktionsart* in SVCs because *Aktionsart* has been shown to be a major factor in how the temporal structure of a situation is construed by the predicate and the context.[40] Example (2.41), taken and modified from Helbig & Buscha (1989), illustrates the different *Aktionsarten* SVCs are able to express.

(2.41) a. Es herrscht/besteht Uneinigkeit zwischen
it[PRON.SG.N] rules/exists:3SG disagreement:SG;F between:PRPE
den Parteien.
the:ARD;ACC;PL parties:PL.
'There is disagreement between the parties.'

b. Uneinigkeit entsteht zwischen den Parteien.
disagreement[SG;N] ensues:3SG between:PRPE the:ARD;ACC;PL parties:PL.
'Disagreement ensues between the parties.'

c. Er schafft Uneinigkeit zwischen
he[PRON.SG.M] creates:3SG disagreement:SG;F between:PRPE
den Parteien.
the:ARD;ACC;PL parties:PL.
'He creates disagreement between the parties.' (Helbig & Buscha 1989: 94)

[39] *Aktionsart*, sometimes translated as apect, refers to the temporal structure of an event described by a lexical unit, i.e. verb.
[40] For an in-depth discussion of *Aktionsart*, see Vendler (1957), Cate (1991), Egg (1994), Tenny (1994), Erbach & Krenn (1993), Pottelberge (2001), and Wolze (2007), among others.

Helbig & Buscha recognize three types of *Aktionsart* in SVCs. The support verb in (2.41a) expresses an event in its entirety and is considered [durative]. The second type indicates a change of state as it indicates the transition from one state to another as in (2.41b). This is an example of an [inchoative] *Aktionsart*, according to Helbig & Buscha. Finally, SVCs that indicate the cause of a change of state or a change of event through outside influence are [causative], as in (2.41c).

Von Polenz (1963) discusses the role of *Aktionsart* in SVCs based on examples such as in (2.42) with *entscheiden* ('to decide') and as in (2.44) *zur Entscheidung bringen* ('to be decided on').

(2.42) Der Bundestag entscheidet über diese
the[ARD.SG.M] congress:SG;M decides:3SG over:PRPE this:DEM;PRON;ACC;F
Frage.
question:SG;F.
'Congress comes to a decision about this question.'

The activity portrayed in (2.42), which includes the base verb *entscheiden* ('to decide'), does not limit or nuance the event type, meaning the verb denotes an activity that happens at this precise moment and therefore is a "punctual verb" (Renicke 1961). Changing (2.42) to a sentence using a construction as in (2.43) would not change the meaning, since *fällen* ('to cut down') and *treffen* ('to hit/meet') are also "punctual verbs" that do not express any intrinsic differences between temporality and spatiality and are thus neutral as to *Aktionsart*. Von Polenz therefore claims that *fällen* ('to cut down') or *treffen* ('to hit/meet') in (2.44) at most emphasize the punctuality aspect of the meaning.

(2.43) Der Bundestag fällt/trifft eine Entscheidung
the[ARD.SG.M] congress:SG;M cuts/hits/meets:3SG a:ARI;ACC;SG;F decision:SG;F
über diese Frage.
over:PRPE this:DEM;PRON;ACC;F question:SG;F.
'Congress makes a decision about this question'

(2.44) Der Bundestag bringt diese
the[ARD.SG.M] congress:SG;M brings:3SG this:DEM;PRON;ACC;F
Frage zur Entscheidung.
question:SG;F to:PRPD-the:ARD;SG;DAT;F decision:SG;F.
'Congress brings forth this question for a decision.' (von Polenz 1963:14)

In contrast, *bringen* ('to bring') in (2.44) does not express a punctual activity but rather a durative activity. In other words, the combination of the support verb *bringen* ('to bring') and the nominalization *Entscheidung* ('decision') causes the punctual activity expressed by *entscheiden* ('to decide') to be extended. In this view, *zur Entscheidung bringen* ('to bring to a decision') in (2.44) conveys the sense that the decision is not made at a precise moment, but rather that the preparatory stage leading up to the decision making, is also included in the meaning of the SVC *zur Entscheidung bringen*.[41] In addition, von Polenz compares *bringen* ('to bring') as in (2.45) and *stellen* ('to set/place') as in (2.46), respectively, to show that different support verbs inherently express different *Aktionsarten*.

(2.45) Der Minister bringt die Frage
the[ARD.SG.M] minister:SG;M brings:3SG the:ARD;ACC;SG;F question:SG;F
zu-r Entscheidung.
to:PRPD-the:ARD;SG;DAT;F decision:SG;F.
'The minister brings the question to a decision.'

[41] See von Polenz (1963: 14) for further discussion.

(2.46) Der Minister stellt die Frage
the[ARD.SG.M] minister:SG;M puts:3SG the:ARD;ACC;SG;F question:SG;F
zu-r Entscheidung.
to:PRPD-the:ARD;SG;DAT;F decision:SG;F.
'The minister brings the question up for decision.'

It is clear, as von Polenz indeed argues, that changing the verb also changes the meaning of the sentence: (2.45) implies a preparatory stage as well as a conclusion to the event of deciding because the SVC is formed with *bringen* ('to bring'). In contrast, (2.46) implies the beginning of an event, but it is unclear whether a decision is made. The difference between (2.45) and (2.46) is that in the former the preparatory as well as the decision making stages are included, but in (2.46), the support verb *stellen* ('to set') only implies a potential conclusion to the process. Von Polenz then compares *bringen*/*stellen* ('to bring/to set') with *setzen* ('to place') to demonstrate that the latter has only a punctual meaning dimension and lacks a conclusive *Aktionsart*. This means that *setzen* only has a causative meaning, as shown in (2.47).

(2.47) Der alte Mann setzt die
the[ARD.SG.M] old:ADJ;NOM;SG;M man:SG;M places:3SG the:ARD;SG;ACC;F
Dampflokomotive in Gang.
steam engine:SG;F in:PRPE gear:SG;M.
'The old man sets the steam engine in motion.'

Von Polenz claims that *setzen* ('to place') in SVCs means that something is set into motion, and that the beginning of the activity is emphasized (inchoative *Aktionsart*) even though the preparatory stage is not included. Thus, SVCs with *setzen* ('to place') as in

(2.47) have a semantic "*Mehrwert"* ('added value')[42] as opposed to their full verb counterparts, such as *betreiben* ('to operate'), *bewegen* ('to move'), or *verwundern* ('to surprise'). The additional semantic meaning of causing or initiating is even more dramatically exemplified in cases such as (2.48).

(2.48) Der Pyrotechniker bringt das
the[ARD.SG.M] pyrotechnician:SG;M brings:3SG the:ARD;ACC;SG;N
Dynamit zu-r Explosion.
dynamite:SG;N to:PRPD -the:ARD;SG;DAT;F explosion:SG;F.
'The pyrotechnician explodes the dynamite.'

(2.49) Die Köchin bringt die Nudeln
the[ARD.SG.F] cook:SG;F brings:3SG the:ARD;ACC;PL noodles:PL
zu-m Kochen.
to:PRPD-the:ARD;DAT;SG;N cook:SG;N.
'The cook brings the noodles to a boil.' (von Polenz 1963:16)

Based on such examples, von Polenz (1963) proposes that the period before the activities described in (2.48) and (2.49) includes both the preparation and the causation of the respective activities. This becomes clear when sentences like (2.48) and (2.49) are compared with causative constructions using *lassen* ('to let') as in (2.50).

(2.50) Die Köchin lässt das Wasser kochen.
the[ARD.SG.F] cook:SG;F lets:SG;F the:ARD;ACC;PL water:SG;N cook:INF.
'The cook lets the water boil.'

[42] *Mehrwert* (lit. 'added value') adds semantic meaning that is introduced by the support verb construction. This meaning part cannot be conveyed by the full verb alone and a full verb sentence must add syntactic elements in order to convey the same meaning as the SVC.

Example (2.49) includes the temporal preparatory stage of the cooking event that is not included in (2.50), which is instead an ongoing cooking activity. Von Polenz (1963: 16) concludes that SVCs are used to express intentional delays of an event. To illustrate that an SVC with *geraten* also includes the preparatory stage of the event, as argued for by von Polenz, consider the sentences in (2.51).

(2.51) a. Der Busch brennt.
the[ARD.M] bush:M;SG burns:3SG.
'The bush is burning.'
b. Der Busch gerät in Brand.
the[ARD.M] bush:M;SG gets:3SG in:PRPE fire:M;SG.
'The bush is starting to burn.'

Der Busch brennt and *Der Busch gerät in Brand* differ in that the sentence with *geraten* includes an implied cause, i.e. it is understood that the bush was not on fire before the causal event. Sentence (2.51a) simply states that the bush is burning at this precise moment (it is understood that some event caused the bush to burn but the full verb *brennen* does not include this meaning component). *Geraten*, as the support verb in (2.51b), conveys the meaning that the bush was not on fire but now it is. Whether the causal event is a singular event, or a chain of events is unknown unless it is explicitly stated. *Geraten* only indicates a change from 'not P' to 'P', but includes no information about the specific nature of the event(s). Nevertheless, a causal event is linguistically implied in (2.51a), as well as in (2.51b) (as discussed in Chapter 1).

Thus far, I have shown that SVCs can cause a change in *Aktionsart* and add the preparatory stage to an expression. At the same time, different support verbs also have different meaning implications, as (2.52) and (2.53) show, where *geraten* ('to get') is used as a support verb.

(2.52) Die junge Frau gerät zu Reichtum.
the[ARD.SG.F] young:ADJ;SG;F woman:SG;F gets:3SG into:PRPD wealth:SG;M.
'The young woman comes into wealth.'

(2.53) Die Frau geriet wegen der
the[ARD.SG.F] woman:SG;F got:3SG;PST because of:PRPG the:ARD;GEN;PL
jungen Katzen in Entzückung.
young:ADJ;GEN;PL cats:PL in:PRPE elation:SG;F.
'The woman became elated by the kittens.'

According to von Polenz, SVCs with *geraten* ('to get') imply a pejorative assessment of an event. On this view, the young woman in (2.52) came into wealth through some sort of scheming. Though von Polenz mentions that *geraten* includes the senses of 'unfortunately,' 'by chance,' or 'unintentionally,' it is still a depreciative event. In my view, however, there is nothing pejorative about a woman getting excited over kittens and, the attribute that best describes the event is that the excitement is unintentional. Unfortunately, von Polenz (1963: 20) assumes that unintentionality also means that the event or situation must be pejorative. In the following chapters, I show in more detail that the support verb *geraten* contributes the concept or notion of unintentionality to the semantics of the construction. That is, the negative meaning component is not contributed by the support verb but rather by the noun in the SVC.

In summary, analyzing SVCs in terms of the semantic contribution of the verb to the entire construction sheds some light on the composition of SVCs. We have seen that SVCs with *stehen* ('to stand') imply that the activity is delayed or even completely on hold but when *stehen* is replaced with *kommen* ('to come') then the implication changes from an anticipated goal to a certain goal. The support verb thus is able to add significant meaning changing information to a construction which von Polenz's analysis shows. Unfortunately, he does not discuss how nouns are affected by different SVCs, i.e. he does not discuss which nouns can participate in SVCs with different support verbs. He mentions that some events such as *zur Kenntnis* ('to note) or *in Umlauf* ('in circulation') can either appear with *kommen* ('to come') or *gelangen* ('to get') as SVs, as in *zur Kenntnis kommen/gelangen*, while others, such as *in Bewegung* ('in motion') or *in Brand* ('in fire') take *geraten* ('to get') as in *in Bewegung/Brand geraten*. Despite von Polenz's detailed analysis of SVCs, the following examples with *Ansehen* ('esteem') and *Schätzung* ('esteem') suggests that his treatment of SVCs is not able to explain the acceptability or unacceptability of certain noun substitutions in SVCs.

(2.54) a. Der Opernsänger kommt zu Ansehen.
The[ARD.SG.M] operasinger:SG;M comes:3SG to:PRPD esteem:SG;F.
'The opera singer becomes well-known.'

b. *Der Opernsänger kommt zu Schätzung.
The[ARD.SG.M] operasinger:SG;M comes:3SG to:PRPD esteem:SG;F.
'The opera singer becomes well-known.'

Von Polenz provides a concise overview of the semantic contributions of SVs, but his analysis does not provide an explanation of why certain nouns are prohibited in combining with certain support verbs.

2.4 DO-SVC and PP-SVC comparison

Next, I discuss previous research on different forms of the SVC itself, namely those with prepositions (PP-SVCs) and those with direct objects (DO-SVCs). These two types of SVCs have different modification patterns that help us better understand their characteristics as compared to idioms and regular verb phrases. I begin with Storrer's (2007) investigation into the differences and similarities of these two types of SVCs.

(2.55) a. Max nimmt (mit dem Minister)
Max takes:3SG (with:PRPD the:ARD;SG;DAT;M minister:SG;DAT)
Verbindung auf.
contact:SG;F up:SPFX.
'Max takes up contact (with the minister).'

b. Moritz tritt (mit dem Minister)
Moritz steps:3SG (with:PRPD the:ARD;SG;DAT;M minister:SG;DAT)
in Verbindung.
in:PRPE contact:SG;F.
'Moritz gets in contact (with the minister).' (adapted from Storrer (2007))

The difference between the DO-SVC in (2.55a) and the PP-SVC in (2.55b) is that in (2.55a) the SVC consists of the noun *Verbindung* ('contact') and the support verb *aufnehmen* ('to get into/pick up/record') while sentence (2.55b) contains not only the SV *treten* and the noun *Verbindung* but also the preposition *in* ('in'). Storrer measures the flexibility of PP-SVCs and DO-SVCs by running them through morphosyntactic

flexibility tests. The author conducts three case studies. The first test involves determiner (zero, definite, indefinite or negation with *kein-* ('no')) and number variation. The second test looks at restrictions of the PredN, and the third test investigates idiomatic SVCs or rather phraseological verbs. This morphosyntactic flexibility is shown in the following sentences, where (2.56) illustrates the fully flexible DO-SVCs, and (2.57) the restricted class of PP-SVCs. Storrer (2007) is interested in the factors that systematically influence the morphosyntactic flexibility of SVCs. To this end, the author performs the same morphosyntactic tests for both types of support verb constructions using data from the DWDS corpus.

(2.56) a. Peter trifft die Entscheidung.
Peter hits:3SG the:ARD;ACC;SG;F decision:SG;F.
'Peter makes the decision.'
b. Peter trifft keine Entscheidung.
Peter hits:3SG no:NEG decision:SG;F.
'Peter makes no decision.'
c. Peter trifft Entscheidungen.
Peter hits:3SG decisions:PL.
'Peter makes decisions.'
d. Peter trifft eine klare Entscheidung.
Peter hits:3SG a:ARI;ACC;SG;F clear:ADJ;ACC;SG;F decision:SG;F.
'Peter makes a clear decision.'

The sentences under (2.56) contain either a definite article (2.56a), the negation *kein-* ('no') as in (2.56b), the plural noun in (2.56c), or an adjective in (2.56d). Even though each of these sentences underwent modification, they are still acceptable. Compare (2.56) with (2.57), which underwent the same modifications.

(2.57) a. *Peter tritt mit dem Minister
Peter kicks/steps:3SG with:PRPD the:ARD;SG;DAT;M minister:SG;M
in die Verbindung.
in:PRPE the:ARD;SG;ACC;F contact:SG;F.
'*Peter gets in the contact with the minister.'

b. *Peter tritt mit dem Minister
Peter kicks/steps:3SG with:PRPD the:ARD;SG;DAT;M minister:SG;M
in keine Verbindung.
in:PRPE no:NEG contact:SG;F.
'*Peter gets in no contact with the minister'

c. *Peter tritt mit den Ministern in
Peter kicks/steps:3SG with:PRPD the:ARD;PL;DAT;M ministers:PL in:PRPE
Verbindungen.
contacts:PL.
'*Peter gets in contacts with the ministers.'

d. ?Peter tritt in eine enge
Peter kicks/steps:3SG in:PRPE a:ARI;ACC;F tight:ADJ;SG;ACC;F
Verbindung mit dem Minister.
contact:SG;F with:PRPD the:ARD;SG;DAT;M minister:SG;M.
'?Peter gets in close contact with the minister.' (Storrer 2007:167-68)

All sentences in (2.57) are unacceptable. For example, in (2.57a) the additional definite determiner renders the sentence unacceptable. Example (2.57b) cannot be negated by *kein* ('no') and (2.57c) is unacceptable because the plural of the PredN, *Verbindungen* ('contacts'), cannot be used in PP-SVCs. Finally, (2.57d) is semantically questionable because PP-SVCs generally do not allow for adjectival modification. Comparing (2.56) with (2.57), it is obvious that DO-SVCs are morphosyntactically much more flexible than their PP-SVC counterparts.

In her next study, Storrer investigates determiner and number variation of the PP-SVCs *in Verbindung treten* ('enter into a connection') and *in Kontakt treten* ('enter into

contact') and compares them with the DO-SVCs *Verbindung halten* ('maintain connection') and *Kontakt halten* ('maintain contact') as shown in Table (2.2).

	PP-SVC		DO-SVC	
	in Verbindung treten	in Kontakt treten	Verbindung halten	Kontakt halten
Definite article modification	0	0	21 (45.5%)	10 (16.9%)
Determiner variation	0		4 (7.3 %)	
Plural variation	0		7 (11.9 %)	

Table (2.2) Comparison of morphosyntactic flexibility of DO-SVCs vs. PP-SVCs
(cf. Storrer 2007: 172)

Table (2.2) summarizes Storrer's findings regarding definite article modification, determiner variation, and plural variation of the PP-SVCs *in Verbindung treten* and *in Kontakt treten* and the DO-SVCs *Verbindung halten* and *Kontakt halten*. Both PP-SVCs have zero (0) instances in each of the categories investigated, which means that these SVCs do not allow any morphosyntactic flexibility, though DO-SVCs exhibit morphosyntactic flexibility. For example, definite article modification occurs in 21 (45.5%) and 10 (16.9%) instances for DO-SVCs, respectively. Determiner variation occurs in 7.3% of DO-SVCs and 11.9% appear with the plural noun form. Storrer concludes that DO-SVCs exhibit more flexibility with respect to determiner and plural variation and that SVCs with *Verbindung* ('connection') have more adjectival modifications than SVCs with *Kontakt* ('contact').

Storrer found similar results regarding morphosyntactic flexibility when she compared the DO-SVC *Anerkennung finden* ('find recognition') and the PP-SVC *zur Anerkennung gelangen* ('to gain recognition') in order to find out whether the different degrees of flexibility are influenced by the SV *treten* ('to step'), as shown in Table (2.3).

	Anerkennung finden	zur Anerkennung gelangen
Indefinite article modification	3.6% (9)	7.1% (1)
Adjectival modification	45% (114)	50% (7)
Define article modification	14.9% (37)	0
Negation with *kein*	4.4% (11)	0
Relative clause modification	5.6% (14)	0
Anaphoric pronoun modification	0.4% (1)	0

Table (2.3) Comparison of morphosyntactic flexibility of DO-SVC vs. PP-SVC
(cf. Storrer 2007: 173)

Table (2.3) shows that the PP-SVC *zur Anerkennung gelangen* ('to gain recognition') is much less flexible than the DO-SVC *Anerkennung finden* ('find recognition') and only allows for indefinite article and adjectival modification. There is a significant difference between the modifications accepted by *Anerkennung finden* ('find recognition') and *zur Anerkennung gelangen* ('to gain recognition') even though number and determiner variation as well as adjective modification restrictions are accounted for by the same type of feature, namely non-referentiality of the PredNs. In essence, Storrer shows that if non-referentiality is the cause for morphosyntactic flexibility, then both SVC types in (2.60)

should exhibit similar modification patterns with regard to article and adjectival modification. Since the PP-SVC is significantly less flexible, it can be assumed that non-referentiality is less important than the construction type of the SVC, or as Storrer puts it, "not all diagnostics for referentiality behave in the same manner" (Storrer 2007: 173). The implications of her findings regarding diagnostics for referentiality are significant because Storrer (2007: 173) argues that both the highly restricted number and determiner variation of PP-SVCs and the large number of PredNs that are modified by adjectives are explained by the same restrictions - non-referentiality of the PredNs.

Storrer shows that the PredN of PP-SVCs has limited modification possibilities (e.g. adverbial or indefinite article modifications) while the PredN of DO-SVCs can be modified much more easily (e.g. adverbial, plural, or negation with *kein* ('no') modifications). In particular, while indefinite article and adverbial modifications are possible for both construction types, PP-SVCs do not allow for definite article modification, negation with *kein* ('no'), relative clauses, or anaphoric pronoun modification. Of special interest is her finding that referentiality alone is not capable of accounting for the data, but that referentiality of the PredN and the construction type (DO-SVC or PP-SVC) interact with each other. Referentiality of the PredN does not restrict adverbial modification of PP-SVC as much as indefinite article modification, and since both restrictions are based on non-referentiality of the PredN, there should be no difference in this morphosyntactic variability. Storrer shows that there are differences in morphosyntactic modification between PP-SVCs and DO-SVCs, but only briefly mentions component substitution. For example, Storrer argues that the causative SVs

bringen (‘to bring’) and *setzen* (‘to put’) are restricted in terms of combining with nouns even though they are of the same semantic type (causative). Observe the following example.

(2.57) a. in Brand setzen
in[PRPE] fire:SG;M set:INF
‘set afire’
b. zu-m Ausdruck bringen
to:PRPD-the:ARD;SG;DAT;M expression:SG;M bring:INF
‘bring to expression’ (cf. Storrer 2007: 166)

However, switching the SVs leads to infelicity, as shown in (2.58)

(2.58) a. *in Brand bringen
in[PRPE] fire:SG;M bring:INF
*‘set in fire’
b. *zum Ausdruck setzen
to[PRPD]-the:ART;SG;DAT;M expression:SG;M set:INF
*‘set to expression’ (cf. Storrer 2007: 166)

Storrer also presents an example in which she changes the SV, as in (2.59a), to show that the sentences are still felicitous, even though they sound odd in German, as Storrer claims.

(2.59) a. *Hans bringt das Haus in Brand.
hans brings:3SG the:ARD;ACC;SG;N house:SG;N in:PRPE fire:SG;M.
*‘Hans brings the house ablaze.’
b. Hans setzt das Haus in Brand.
hans puts:3SG the:ARD;ACC;SG;N house:SG;N in:PRPE fire:SG;M.
‘Hans sets the house ablaze.’ (cf. Storrer 2007: 166)

Storrer only changes the SV in each construction and does not replace the PredN with semantically similar nouns. In essence, she shows that support verbs are not freely interchangeable in SVCs. Consider (2.60) and (2.61), where the PredN in the (b) sentences is replaced with a semantically close substitute for the PredN in (a) sentence.

(2.60) a. Laura setzt das Haus in Brand.
Laura sets:3SG the:ARD;ACC;SG;N house:SG;N in:PRPE fire:SG;M.
'Laura sets the house ablaze.'
b. #Laura setzt das Haus in Feuer.
#Laura puts:3SG the:ARD;ACC;SG;N house:SG;N in:PRPE fire:SG;M.
'Laura sets the house afire.'

When *Feuer* ('fire') is substituted for *Brand* ('fire') in (2.60), the two sentences express different meanings, which I show in more detail in Chapter 6. Suffice it to say here that (2.60a) indicates an onset of an event, while (2.60b) indicates a motion towards a location.

(2.61) a. Laura bringt die Zuschauer in
Laura brings:3SG the:ARD;ACC;SG;N spectators:PL in:PRPE
Begeisterung.
excitement:SG;F.
'Laura brings the spectators to elation.'
b. Laura bringt die Zuschauer in
Laura brings:3SG the:ARD;ACC;SG;N spectators:PL in:PRPE
Entzücken.
delight:SG;N.
'Laura delights the spectators.'

In (2.61b), the PredN is replaced with a semantically similar noun (*Entzücken* (‘delight’)), which does not result in unacceptability as in (2.60). Since Storrer does not explore nor explain this type of selectional restrictions, the data just discussed is not accounted for by Storrer’s explanation.

2.5 SVCs and BVCs

This section compares SVCs and their ‘full verb’ counterparts, also known as base verb constructions (BVCs). The goal is twofold. The first goal is to determine whether SVCs can be paraphrased with a corresponding base verb (BVC), while the second goal is to examine whether BVCs can be replaced by SVCs. Consider the following examples.

(2.62) a. Die Mutter bringt das
the[ARD.SG.N] mother:SG;F brings:3SG the:ARD;SG;ACC;F
kleine Kind zu-r Ruhe.
small:ADJ;SG;ACC;N child:SG;N to:PRPD-the:ARD;SG;DAT;F quiet:SG;F.
‘The mother quiets the little child.’

b. Die Mutter beruhigt das
the[ARD.SG.N] mother:SG;F calms:3SG the:ARD;SG;ACC;F
kleine Kind.
small:ADJ;SG;ACC;N child:SG;N.
‘The mother calms the little child down.’

Example (2.62b) is a BVC paraphrase of the SVC in (2.62a). SVCs may encode the preparatory stage leading up to an event as in (2.62a). This preparatory stage is not conveyed by the BVC in (2.62b) because the base verb *beruhigen* (‘to calm down’) does

not encode such a meaning. In other words, the mother is soothing the child at this very moment.

(2.63) a. Das Erdbeben bringt die Höhle
the[ARD.SG.N] earthquake:SG;N brings:3SG the:ARD;SG;ACC;F cave:SG;F
zu-m Einstürzen.
to:PRPD-the:ARD;SG;DAT;M collapsing:sg;m.
'The earthquake causes the cave to collapse.

b. *Das Erdbeben stürzt die
*the[ARD.SG.N] earthquake:SG;F collapses:3SG the:ARD;SG;ACC;F.
Höhle ein.
cave:SG;F on:SPFX.
'The earthquake collapses the cave.'

c. Die Höhle wird durch das
the[ARD.SG.ACC.F] cave:SG;F got:3SG through:prpa the:ARD;SG;ACC;N
Erdbeben zu-m Einsturz
earthquake:SG;N to:PRPD-the:ARD;SG;DAT;M collaps:SG;M
gebracht.
braught:PST;PTCP.
'The cave was collapsed by the earthquake.'

The BVC paraphrase of (2.63a) is unacceptable. For (2.63b) to be an acceptable paraphrase of (2.63a), the BVC paraphrase must be in the passive as in (2.63c). One problem that arises when paraphrasing SVCs with BVCs is the inability of some SVCs to have a BVC paraphrase. Another problem is the failure of such paraphrases to fully capture all of the meaning conveyed by the SVCs because the preparatory stage is not featured as prominently in the base verb meaning. Because the communicative function

of SVCs and BVCs fulfill different linguistic purposes,[43] the BVC paraphrases do not express exactly the same meanings.

In order to explain this phenomenon, Storrer conducts two investigations. First, she investigates under what conditions BVCs may be replaced by SVCs, and second, she looks at the replaceability of SVCs with their BVC equivalents. Examining the data and deciding whether and under what conditions a BVC can be replaced by an SVC, Storrer (2007) finds that all verbs in her study (*absagen* ('to cancel/revoke'), *unterrichten* ('to teach'), *helfen* ('to help'), and *wirken* ('to appear/act/function')) are polysemous, i.e. they have multiple meanings, for example, *unterrichten* in (2.64), can be interpreted as either *to teach* or *to inform*, and that the corresponding SVCs express only one of these senses of each verb. Consider the BVC with *unterrichten* in (2.64a) and the corresponding SVC *Unterricht erteilen* ('to give a class') in (2.64b).

(2.64) a. Der Professor unterrichtet der Klasse
the[ARD.SG.M] professor:SG;M teaches:3SG the:ARD;ACC;SG;F class:SG;F
Frame Semantics.
Frame Semantics.
'The professor teaches the class Frame Semantics.'

b. Der Professor erteilt der Klasse
the[ARD.SG.M] professor:SG;M accords:3SG the:ARD;ACC;SG;F class:SG;F
Frame Semantics Unterricht.
Frame Semantics instruction:SG;M.
'The professor teaches the class Frame Semantics.'

[43] This communicative difference is discussed in the next chapter.

Since the sentences in (2.64) are used in the sense of teaching and the SVC and the BVC are meaning equivalents, it is possible to use either one to convey that the professor is teaching Frame Semantics to his students. However, the following examples show that when the meaning of the BV *unterrichten* in (2.65a) is used as an SVC as in (2.65b), then the corresponding SVC with *Unterricht erteilen* in (2.65b) becomes unacceptable.

(2.65) a. Ebenso kamen ihm Mitglieder
likewise[ADV] came:3pl;pst him:PRON;DAT;SG;M members:PL
der römischen Gemeinde entgegen,
the:ARD;DAT;SG;F roman:ADJ;SG;DAT;F parish:SG;F toward:ADV,
die bereits über seine
the:REL;PRON;NOM;PL already:ADV over:PRPE his:PRON;ACC;SG;M
Ankunft unterrichtet waren.
arrival:SG;F informed:PST;PTCP were:3PL;AUX.
'Likewise, members of the Roman parish, who were already informed about his arrival, met up with him.'

b. *Ebenso kamen ihm Mitglieder
likewise[ADV] came:3pl;pst him:PRON;DAT;SG;M members:PL
der römischen Gemeinde entgegen,
the:ARD;DAT;SG;F roman:ADJ;SG;DAT;F parish:SG;F toward:ADV,
die bereits über seine
the:REL;PRON;NOM;PL already:ADV over:PRPE his:PRON;ACC;SG;M
Ankunft Unterricht erteilt waren.
arrival:SG;F class:SG;M accorded:PST;PTCT were:3PL;AUX.
*'Likewise, members of the Roman parish, who were already given a class about his arrival, met up with him.'

c. Ebenso kamen ihm Mitglieder
likewise[ADV] came:3pl;pst him:PRON;DAT;SG;M members:PL
der römischen Gemeinde entgegen,
the:ARD;DAT;SG;F roman:ADJ;SG;DAT;F parish:SG;F toward:ADV,
die bereits über seine
the:REL;PRON;NOM;PL already:ADV over:PRPE his:PRON;ACC;SG;M
Ankunft in Kenntnis gesetzt waren.
arrival:SG;F in:PRPE knowledge:SG;F sat:PST;PTCP were:3PL;AUX.
'Likewise, members of the Roman parish, who were already informed about his arrival, met up with him.' (Storrer 2007:179)

For (2.65b) to be an acceptable paraphrase of (2.65a), the SVC should be *in Kenntnis setzen* ('to inform') or *unterrichten über* ('inform about s.th') as shown in (2.65c). Therefore, in the case of *unterrichten* with the meaning of 'to inform,' it is not possible to replace the BVC with the related SVC *Unterricht erteilen* ('to teach'). Based on this example, Storrer argues that replacing an SVC with a BVC is only possible if the SVC and the BVC have the same sense, e.g. both senses correspond to *inform*. This sense equivalence is given in (2.64), but in (2.65a) and (2.65b), the meanings of the BVC and the SVC change, which results in (2.65b) not being an appropriate paraphrase of (2.65a). This discussion has shown that BVCs are only replaceable with SVCs when they are meaning equivalents.

I now turn to the question of when it is possible to use BVCs instead of SVCs. Consider the following sentences.

(2.66) a. Der alte Mann bringt die
the[ARD.SG.M] old:ADJ;NOM;SG;M man:SG;M brings:3SG the:ARD:ACC;SG;F
Dampflokomotive in Betrieb.
steam engine:SG;F in:PRPE operation:SG;M.
'The old man starts up the steam engine.'

b. Der alte Mann betreibt
the[ARD.SG.M] old:ADJ;NOM;SG;M man:SG;M operates:3SG
die Dampflokomotive.
the:ARD:ACC;SG;F steam engine:SG;F.
'The old man operates the steam engine.'

Even though the SVCs in (2.66a) and the BVCs in (2.66b) are identical in their end result, the BVC paraphrase is not an exact meaning equivalent of the SVC because the SVC explicitly includes the preparatory stage, which is not the case with the BVC.

According to Storrer, the reason why SVCs are difficult to replace with BVCs is that SVCs tend to develop a specific sense that is not necessarily part of the meaning of the base verb. This is illustrated by the following example with the SVC *Absage erteilen* ('to give a rejection').

(2.67) a. […], sondern gleichzeitig ein Appell
[…], instead:ADV simultaneously:ADV a:ARI;SG;M appeal:SG;M
an alle Völker, dem Krieg
to:PRPE all:ADJ;ACC;PL peoples:PL, the:ARD;SG;DAT;M war:SG;M
eine endgültige Absage zu erteilen.
a:ARI;ACC;F definite:ADJ;SG;ACC;F rejection:SG;F to:PRPD issue:INF.
'[…], but it is simultaneously an appeal to all people to reject the war.'

b. […], sondern gleichzeitig ein Appell
[…], instead:ADV simultaneously:ADV a:ARI;SG;M appeal:SG;M
an alle Völker, den Krieg
to:PRPE all:ADJ:ACC;PL peoples:PL, the:ARD;SG;ACC;M war:SG;M
endgültig ab-zu-sagen.
definite:ADJ down:SPFX-to:PRPD-say:INF.
'[…], but it is simultaneously an appeal to all people to cancel/call off the war.' (Storrer 2007: 183)

In (2.67a), *Absage erteilen* ('to give a rejection') is used in the sense of 'refusal.' Paraphrasing (2.67a) may cause a problem because *Absage* ('rejection') can be interpreted as either 'to cancel' or as 'to reject.' Because *Absage erteilen* ('to give a rejection') has the sense of 'refusal,' the BVC *absagen* ('to reject') does not convey the same meaning. In fact, the meaning of (2.67b) is 'cancel or call off,' which is not the meaning conveyed by the SVC in (2.67a). It is important that the base verb paraphrase encodes the same sense as the SVC in order for the substitution to be successfull. As we have seen above, this is not always possible since there is not always a (near) meaning

equivalent base verb available. Following Storrer's argument that paraphrases of SVCs with full verbs are possible if they express the same meaning, I investigate whether such substitution is useful in determining selectional restrictions regarding nouns in SVCs.

Consider the following sentences where the SVC (2.68a) and the BVC (2.68b) express almost the same meaning.[44]

(2.68) a. Die Frau gerät in Angst.
the[ARD.SG.F] woman:SG;F gets:3SG in:PRPE fear:SG;F.
'The woman becomes afraid.'
b. Die Frau wird ängstlich.
the[ARD.SG.F] woman:SG;F becomes:3SG fearful:ADJ.
'The woman becomes fearful.'

The above sentence pair illustrates that it is possible to replace the SVC with the corresponding full verb (in this case verb + adjective) construction. Taking the paraphrase argument a step further, it should be possible to replace a full verb + adjective construction as in (2.69a) with a semantically equivalent full verb + adjective construction while keeping the meaning intact as in (2.69b).

(2.69) a. Die Frau wird ängstlich.
the[ARD.SG.F] woman:SG;F becomes:3SG fearful:ADJ.
'The woman becomes fearful.'
b. Die Frau wird panisch.
the[ARD.SG.F] woman:SG;F becomes:3SG panicky:ADJ.
'The woman becomes panicky.'

[44] I ignore the slight meaning difference between SVCs and BVCs regarding the preparatory stage discussed previously.

Since it is possible to replace *ängstlich* with *panisch* and still keep an approximate meaning equivalence, I argue that it should be possible to convert the BVC to an SVC with the de-adjectival noun *Panik*, which is shown in (2.70).

(2.70) a. Die Frau wird panisch.
the[ARD.SG.F] woman:SG;F becomes:3SG panicky:ADJ.
'The woman becomes panicky.'
b. Die Frau gerät in Panik.
the[ARD.SG.F] woman:SG;F gets:3SG in:PRPE panic:SG;F.
'The woman ends up in a panic.'

Example (2.70) shows that the SVC with *Panik* is felicitous and thus the noun *Panik* can replace *Angst* in (2.68) even thought the meaning of these two nouns is not equivalent, but rather has a meaning overlap. If no base verb paraphrase exists, it is also not possible to find a base verb as a meaning equivalent and another SVC. Consider (2.71) - (2.73).

(2.71) a. Die Frau gerät in Zorn.
the[ARD.SG.F] woman:SG;F gets:3SG in:PRPE anger:SG;F.
'The woman ends up in anger.'
b. Die Frau wird zornig.
the[ARD.SG.F] woman:SG;F becomes:3SG angry:ADJ.
'The woman becomes angry.'

(2.72) a. Die Frau wird zornig.
the[ARD.SG.F] woman:SG;F becomes:3SG angry:ADJ.
'The woman becomes angry.'
b. *Die Frau wird grollig.
the[ARD.SG.F] woman:SG;F becomes:3SG spiteful:ADJ.
*'The woman becomes spiteful.'

(2.73) a. *Die Frau wird grollig.
the[ARD.SG.F] woman:SG;F becomes:3SG spiteful:ADJ.
*‘The woman becomes spiteful.’
b. *Die Frau gerät in Groll.
the[ARD.SG.F] woman:SG;F gets:3SG in:PRPE spite:SG;F.
*‘The woman ends up in spite.’

The question then is whether this argument is applicable to all SVCs, especially those that have BVC meaning equivalents, which would help in determining which nouns are allowed to replace a PredN in SVCs. The following explores this possibility with the SVC *in Widerspruch geraten* and the synonym *Widerrede*.

(2.74) a. Die Frau gerät in Widerspruch.
the[ARD.SG.F] woman:SG;F gets:3SG in:PRPE contradiction:SG;F.
‘The woman ends up in contradiction.’
b. Die Frau widerspricht.
the[ARD.SG.F] woman:SG;F contradicts:3SG.
‘The woman contradicts (s.b./s.th).’

(2.75) a. Die Frau widerspricht (dem
the[ARD.SG.F] woman:SG;F contradicts:3SG (the:ARD;DAT;SG;M
Polizisten).
police officer:SG;M).
‘The woman contradicts (the police officer).’
b. Die Frau widerredet (dem
the[ARD.SG.F] woman:SG;F contradicts:3SG (the:ARD;DAT;SG;M
Polizisten).
police officer:SG;M).
‘The woman contradicts (the police officer).’

In (2.75) the full verb *widersprechen* is replaced with the meaning equivalent *widerreden*. If we follow the example in (2.69), then the full verb can be nominalized and inserted

into the SVC, generating (2.76). However, *Widerrede* is not acceptable in SVCs with *geraten*.

(2.76) a. Die Frau widerredet (dem
the[ARD.SG.F] woman:SG;F contradicts:3SG (the:ARD;DAT;SG;M
Polizisten).
police officer:SG;M).
'The woman contradicts (the police officer).'

b. *Die Frau gerät in Widerrede.
the[ARD.SG.F] woman:SG;F gets:3SG in:PRPE contradiction:SG;F.
'The woman ends up in contradiction.'

This discussion has shown that, even though it is sometimes possible to replace an SVC with a BVC and then that BVC with another SVC in order to find acceptable noun replacements, this method does not always work, as (2.74) - (2.76) have shown. This means that SVC/BVC or BVC/SVC paraphrasing is not a good indicator for noun selectional restrictions since this 'test' may only indicate possible noun substitutes even though they are not acceptable in SVCs.

2.6 Conclusions

In this chapter I discussed several approaches to the evaluation of certain aspects of SVCs. In Section 2.2, I reviewed research regarding referentiality of the noun in SVCs. The consensus is that lexicalized SVCs such as *in Gefahr laufen* ('walk into danger') are less referential than non-lexicalized SVCs such as *eine Verhandlung aufnehmen* ('start of a trial') because they have taken on a specialized meaning and thus cannot be analyzed

compositionally. Lexicalized SVCs have idiomatic characteristics in that they cannot be analyzed semi-compositionally and the meaning is assigned to the entire construction. Section 2.3 examined at the semantic contribution of the verb in SVCs to determine how the support verb influences the meaning of the overall construction. Previous research by von Polenz (1963), Helbig & Buscha (1989), Winhart (2000), Storrer (2007), and Langer (2008) recognize that the support verb is capable of changing the *Aktionsart* originally expressed by the full verb. Because SVCs are able to express a situation more concisely than a base verb construction (BVC), the full verb construction must add information in order to realize the change in *Aktionsart* expressed by the SVC. Section 2.4 compared direct object SVCs with prepositional SVCs to show that the morphosyntactic variability between these two types of SVCs is different, probably because PP-SVCs seem to be more lexicalized (idiomatic) than DO-SVCs. Finally, in Section 2.5, I compared SVCs with their base verb counterparts. The findings showed that it is possible to replace SVCs with full verbs if the full verb also encompasses the meaning expressed by the SVC. At the same time, there are instances in which a full verb paraphrase must utilize a different verb in order to convey the meaning similar to the SVC. However, a full verb paraphrase may not always completely capture the meaning of the SVC. As a result, it is nearly impossible to predict which near-synonym nouns are able to participate in a given SVC.

Previous research provided much insight into the inner workings of SVCs ranging from the change in *Aktionsart* to the semantic reduction of the verb within the SVC. Although these analyses provide answers to a number of important issues surrounding SVCs (e.g. morphosyntactic characteristics of DO-SVCs and PP-SVCs), they do not

address the question of which selectional restrictions apply to nouns in SVCs. In the following chapters, I examine these selectional restrictions in more detail, providing an analysis rooted in Construction Grammar and Frame Semantics. The focus of my analysis is one specific type of German SVC, namely SVCs with *geraten* as a support verb.

Chapter 3

Frame Semantics and Event-based Frame Semantics

3.1 Introduction

As a basis for my analysis of SVCs with *geraten*, I adopt the principles of Frame Semantics as laid out by Fillmore (1982, 1985) in the modified event-based approach proposed by Boas (2003). This chapter provides part of the necessary background for my analysis. I first discuss Frame Semantics and FrameNet, the lexical database based on the principles of Frame Semantics. Then, I show how frames are related to each other and discuss how support verbs are analyzed in FrameNet. Finally, I briefly discuss event-based Frame Semantics (Boas 2003), which provides the necessary tools to account for selectional restrictions for nouns in SVCs in subsequent chapters. This discussion will serve as a basis for the remainder of this dissertation, in which I propose to use a modified event-based Frame Semantics approach in order to explain the selectional restrictions that apply to nouns in SVCs with *geraten*.

3.2 Frame Semantics

According to Fillmore (1985), word meanings can only be understood against a background of beliefs, experiences, and practices that motivate the concept encoded by the word. Fillmore and Atkins (1992:76-77) describe the concept of semantic frames as follows:

> A word's meaning can be understood only with reference to a structured background of experiences, beliefs, or practices, constituting a kind of conceptual

> prerequisite for understanding the meaning. Speakers can be said to know the meaning of the word only by first understanding the background frames that motivate the concept that the word encodes. Within such an approach, words or word senses are not related to each other directly, word to word, but only by way of their links to common background frames and indications of the manner in which their meanings highlight particular elements of such frames.

In order to understand most concepts, it is necessary to understand other concepts, as these are defined against backgrounds of other concepts and provide the background for the interpretation of words. The meaning of *Tuesday*, for example, can only be fully understood if the hearer knows about a system in which time is divided up into units like years, months, weeks, and days (the so-called `Calendric Unit` frame).[45] It is also necessary that the hearer knows that *Tuesday* is the day between Monday and Wednesday and that it can either be the second or third day of the week depending on social conventions fixing the beginning of the week. Another example is *bachelor*. According to Petruck (1996), *bachelor* is defined against a prototype background frame, rather than in terms of all the unusual circumstances in which the word might be used. This suggests that speakers are willing to extend the word's frame or create a new frame that does not match the prototype frame, which means that the meaning of a word is not defined in relation to other words, but in relation to its background frame. Words do not activate the entire common background knowledge; instead words select those aspects of world knowledge that the word focuses on and shared backgrounds allow words to be networked together. Each frame has a set of associated words that stand in a particular

[45] FrameNet uses different font conventions to distinguish semantic frames and frame elements. Semantic frames are in Courier new font e.g. `Commercial_transaction` while frame elements are in New Times Roman small caps e.g. BUYER, SELLER, or GOODS. In sentence annotation, FEs are indicated in angled brackets in subscript, e.g.[$_{\text{<Seller>}}$Bob].

backgrounding relation. It is through the frames and their associated sets of lexical items that these relations are understood and it is assumed that there is always some background knowledge that is activated by a word. Frames provide the conceptual structures that in turn provide the context speakers of a language need to interpret those structures.

A word can profile[46] participants, also known as frame elements (FEs) (specific instances of more general semantic roles such as agent, patient, etc.), in a frame and therefore focus the meaning of the sentence on that word. For example, the `Commercial_transaction` frame describes situations in which a BUYER acquires GOODS or SERVICES from a SELLER in exchange for a sum of MONEY and is evoked by a variety of words such as *buy*, *sell*, *charge*, *payment*, or *expensive*.

To illustrate how FEs interact in a frame, consider the `Commercial_transaction` frame, illustrated in (3.1). The verb *sell* profiles the SELLER and the GOODS while *buy* profiles the BUYER and the GOODS.

(3.1) a. [<Buyer>**John**] *buys*[tgt] [<Goods>**the car**] [<Seller>from Peter] [<Money>for 20,000 dollars].
b. [<Seller>**Peter**] *sells*[tgt] [<Goods>**the car**] [<Buyer>to John] [<Money>for 20,000 dollars].
c. [<Seller>**Peter**] *charged*[tgt] [<Buyer>John] [<Money>**20,000 dollars**] [<Goods>for the car].
d. [<Buyer>**John**] *spent* [tgt] [<Money>**20,000 dollars**] [<Goods>on the car].
e. [<Goods>**The car**] *costs*[tgt] [<Money>**20,000 dollars**].

[46] Profiling refers to lexically profiled entities that are obligatorily accessed and are brought into perspective. These entities act as focal points within a scene. Backgrounding, on the other hand, refers to frame elements that are not obligatorily expressed (for more details, see Goldberg 1995).

Frame elements (FEs) like BUYER, SELLER, GOODS and MONEY are regular participants, features, or attributes of the situation described by the frame. Not all FEs are obligatory, but their realization depends on the perspective of the word that evokes a given frame. Whether a FE is profiled or backgrounded depends on the perspective a LU takes of an event and depending on that perspective, different FEs are obligatorily realized at the syntactic level. For example, verbs like *buy*, *sell* or *cost* obligatorily profile the FE GOODS as in (3.1a), (3.1b), and (3.1e). *Cost* obligatorily profiles the MONEY, while *buy* profiles the BUYER and the GOODS and backgrounds the SELLER and the MONEY. *Sell* profiles the SELLER and the GOOD and backgrounds the BUYER and the MONEY. Thus, in Frame Semantics the description of a verb includes reference to its semantic background frame and a valence description covering the syntactic range of the verb and how it expresses its FEs. In contrast, (3.2) illustrates a sentence that does not profile obligatory FEs and is therefore unacceptable.

(3.2) *[$_{<Buyer>}$**John**] *spent*^{tgt} [$_{<Goods>}$on the car] [$_{<Seller>}$from Peter].

A complete description of *spend* would specify that the BUYER and the MONEY must be realized syntactically, thus disallowing examples as in (3.2), which does not profile a syntactically obligatory FE (MONEY).

Frame Semantics differs from other approaches to linguistic semantics such as the checklist approach (see Fillmore 1975) or the dictionary approach (see Goddard 1998:26-36). The checklist approach requires a linguistic form to satisfy a set of conditions before

it can be used appropriately or truthfully. In Frame Semantics the relationship of words is not defined in relation to other words, but in relation to its background frame. The checklist approach falls short of giving a full picture of word meaning or understanding, because it focuses on a specific set of conditions that must be fulfilled. If these conditions are not met, the word cannot be understood or used appropriately. Since Frame Semantics allows speakers to understand a word according to its usage, it is possible to have synonyms and antonyms in the same frame. Words that occur in different frames are also understandable, because they relate to each other in certain ways as discussed above. A dictionary view of words does not convey the entire picture of a word's meaning, since definitions are often circular and words are defined by synonymy. Using Frame Semantics to investigate the semantic distribution of SVCs allows to expand the meaning of a word beyond a set of predefined conditions or syntactic patterns.

3.2.1 FrameNet

FrameNet[47] is a lexical database that is based on the principles of Frame Semantics and includes lexical entries for words, frame descriptions (including their frame elements), annotated corpus examples from the British National Corpus, and sense descriptions. In FrameNet the lexical unit (Cruse (1986: 23-48)) is the primary unit of analysis whose semantic and syntactic properties are described with respect to a semantic frame. As Boas (2005: 12) notes, "lexical unit (LU) is defined as a pairing of a word with a particular sense that evokes a semantic frame." For example, *boil* as in *Joe boiled the*

[47] http://www.icsi.berkeley.edu/~framenet

potato and *Joe boiled with anger* evokes two different frames (‘Apply_heat’ vs. ‘Emotion_heat’), which means that *boil* has (at least) two distinct lexical units. The different senses are defined with reference to different semantic frames in FrameNet.

To illustrate how Frame Semantics is implemented in FrameNet, I again use *boil* as an example. First, FrameNet lists five distinct lexical units according to the semantic frames that *boil* evokes. These are: Emotion_heat, Cause_harm, Apply_heat, Absorb_heat, and Cause_change_of_phase. To illustrate the structure of lexical entries in FrameNet, I use the Cause_harm frame evoked by *boil*. Lexical entries consist of three central components. The first is the Frame Element Table, which in this case provides a detailed definition of the Cause_harm frame that describes

> situations in which an AGENT or a CAUSE injures a VICTIM. The BODY_PART of the VICTIM which is most directly affected may also be mentioned in the place of the VICTIM. In such cases, the VICTIM is often indicated as a genitive modifier of the BODY_PART, in which case the VICTIM FE is indicated on a second FE layer.[48]

The frame description also encompasses a list of core and non-core FEs[49] with a definition of each FE and corpus sentences. The Cause_harm frame has four core frame elements. The AGENT is the person causing the VICTIM’s injury, while the place where the bodily injury occurs is identified by the BODY_PART. The CAUSE is an expression that indicates some non-intentional, typically non-human, force that inflicts

[48] http://framenet.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Cause_harm.
[49] FrameNet distinguishes between core and non-core FEs. Core FEs instantiate a conceptually necessary component of a frame (e.g. a SELLER in the Commerce_sell frame), while non-core elements are not necessary for the conception of the frame (e.g. MONEY in the Commerce_sell frame). Not all core FEs need to be realized syntactically at the same time (e.g. [$_{<Seller>}$Bob] sold^{tgt} [$_{<Goods>}$the car].)

harm on the VICTIM. Finally, the VICTIM is the being or entity that is injured.[50] Besides the frame definition and a list of the core and non-core FEs, the Frame Element Table also has a list of all the LUs (Lexical Units) that evoke the frame attached.[51]

The second component of a lexical entry in FrameNet is the Realization Table, as shown in Figure (3.1), which provides a dictionary definition of the relevant LU and summarizes the syntactic realizations of the frame elements.

Figure (3.1) Realization Table for *boil*

boil.v

Frame: Cause_harm

Definition:

FN: harm people by putting them in boiling water or oil

Frame Elements and Their Syntactic Realizations

The Frame Elements for this word sense are (with realizations):

Frame Element	Number Annotated	Realization(s)
Agent	(5)	CNI.-- (4) NP.Ext (1)
Body_part	(1)	NP.Obj (1)
Depictive	(1)	AJP.Dep (1)
Instrument	(2)	PP[in].Dep (2)
Result	(1)	PP[to].Dep (1)
Victim	(5)	DNI.-- (1) NP.Ext (2) NP.Obj (2)

[50] FE descriptions adapted from FrameNet [http://framenet.icsi.berkeley.edu].
[51] Technically the list of LUs is not regarded as part of the Frame Element Table, but is included on the web.

For example, the Realization Table above shows that the FE AGENT occurs in five sentences and is realized as CNI four times and as NP.Ext once. The third part of the Lexical Entry Report provides a summary of the valence patterns which can be found with a LU, that is, "the various combinations of frame elements and their syntactic realizations which might be present in a given sentence" (Fillmore et al. 2003: 330). The second row in the valence table for *boil* in Figure (3.2), shows that the FE BODY_PART is only realized as an noun phrase object (NP.Obj).[52]

Figure (3.2) Valence Table for *boil*

Valence Patterns:

These frame elements occur in the following syntactic patterns:

Number Annotated	Patterns		
1 TOTAL	Agent	Body_part	Victim
(1)	CNI --	NP Obj	DNI --
1 TOTAL	Agent	Depictive	Victim
(1)	NP Ext	AJP Dep	NP Obj
2 TOTAL	Agent	Instrument	Victim
(1)	CNI --	PP[in] Dep	NP Ext
(1)	CNI --	PP[in] Dep	NP Obj
1 TOTAL	Agent	Result	Victim
(1)	CNI --	PP[to] Dep	NP Ext

[52] Frame Elements that are conceptually salient but do not occur as overt lexical or phrasal material are marked as null instantiations. There are three types of null instantiations: Constructional Null Instantiation (CNI), Definite Null Instantiation (DNI), and Indefinite Null Instantiation (INI). See Fillmore et al. (2003: 320-321) for details.

The discussion of *boil* illustrates only how one LU evokes the `Cause_harm` frame and how lexical units are structured in FrameNet (Frame Element Table, Realization Table, and valence patterns). In fact, there are many more LUs that evoke this frame all with their own lexical entries.[53] FrameNet presents advantages over other lexical resources like traditional dictionaries or lexical databases in that it is organized around highly specific semantic frames that capture the background knowledge necessary to understand the meaning of LUs. Another advantage of FrameNet is that it provides corpus based example sentences and a list of all possible valences of a given LU.

3.2.2 Frame to Frame Relations

Semantic relations in FrameNet are represented by grouping LUs together in the same frame and in the use of semantic types that are applied to LUs, frames, and FEs. Two of these relationships are discussed here: (1) inheritance and (2) subframe relationships.[54] Frame relations are directed (asymmetric) between two frames in that one frame is more abstract (super_frame), while the other is more dependent (sub_frame).

An Inheritance link exists between a child (sub_frame) and a parent (super_frame) in which the child is a more specific instantiation of the parent. In other words, anything that is true about the meaning of the parent frame must also be true about the child, either

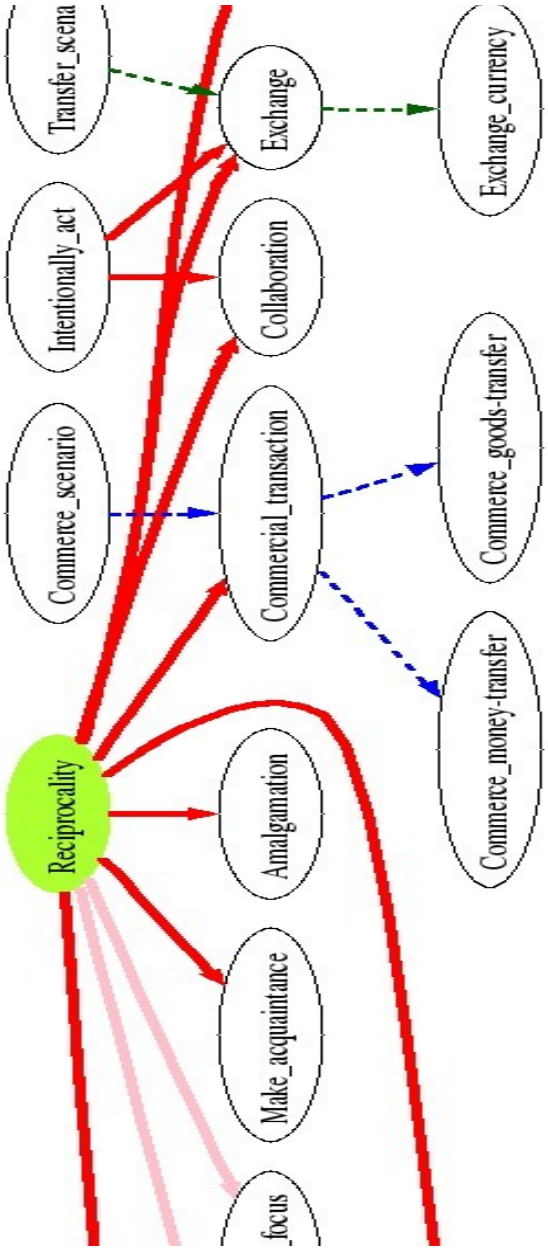
[53] The following LUs also evoke the `Cause_harm` frame: bash.v, batter.v, bayonet.v, beat up.v, beat.v, belt.v, biff.v, bludgeon.v, boil.v, break.v, bruise.v, buffet.v, burn.v, butt.v, cane.v, chop.v, claw.v, clout.v, club.v, crack.v, crush.v, cudgel.v, cuff.v, cut.v, elbow.v, electrocute.v, electrocution.n, flagellate.v, flog.v, fracture.v, gash.v, hammer.v, hit.v, horsewhip.v, hurt.v, impale.v, injure.v, jab.v, kick.v, knee.v, knife.v, knock.v, lash.v, maim.v, maul.v, mutilate.v, pelt.v, poison.v, poisoning.n, pummel.v, punch.v, slap.v, slice.v, smack.v, smash.v, spear.v, squash.v, stab.v, sting.v, stone.v, strike.n, strike.v, swipe.v, thwack.v, torture.v, transfix.v, welt.v, whip.v, and wound.v.

[54] For a more complete discussion of frame-to-frame relations, see Ruppenhofer et al. (2010: 73).

equally specific or more specific. Consider again the Commercial_transaction frame that is evoked by LUs such as *buy*, *sell*, and *spend* and that inherits from the more general Reciprocality frame. That is, all FEs in the Reciprocality frame have corresponding FEs in the Commercial_transaction frame, making the Commercial_transaction frame a more specific instance of the Reciprocality frame. For example, the BUYER and the SELLER FEs in the Commercial_transaction frame are more specific instances of the PROTAGONIST_1 and the PROTAGONIST_2 FEs in the Reciprocality frame, respectively. The FrameGrapher[55] representation in Figure (3.3) visualizes the relationship between the "parent" frame (Reciprocality) and the "child" frame (Commercial_transaction) by pointing to it, thus indicating the inheritance relationship between these two frames.

[55] http://framenet.icsi.berkeley.edu/FrameGrapher/

Figure (3.3) FrameNet Frame Grapher for `Reciprocality`



The second relation is the subframe relation, which holds between a complex frame (super_frame) and component frame(s) (sub_frame), and describes the relationship of the different sequential parts of a more complex event. Sequences of states and transitions of a complex frame can be described by separate frames, the subframes, each of which can be described as a frame itself. I again use the `Commercial_transaction` frame as an illustration. This complex frame has two subframes, the `Commerce_money-transfer` frame and the `Commerce_goods-transfer` frame, in which FEs of the complex frame can be mapped to FEs in the subframes. For example, in the `Commerce_money-transfer` frame, MONEY ($20,000) transfers from the BUYER (John) to the SELLER (Peter) for some GOODS (car). Both frames (`Commerce_money-transfer` and `Commerce_goods-transfer`) are related to the `Commercial_transaction` frame via subframe relations. I now turn to the description of support verbs in FrameNet.

3.2.3 SVs in FrameNet

Thus far, I have provided examples in which the verb is the frame-evoking element, as in the following example.[56]

(3.3) a. [<Buyer>John] *buys*[tgt] [<Goods>the car] [<Seller>from Peter].
b. [<Seller>Peter] *sells*[tgt] [<Goods>the car] [<Buyer>to John].

[56] Both sentences in (3.3) are base verb constructions (BVCs).

In (3.3a) *buys* evokes the `Commercial_transaction` frame, while in (3.3b) the verb *sell* does. It is clear that in (3.3) the meanings of the sentences are that of buying and selling, respectively, i.e. the frame evoked by the verb in each sentence is dominant. However, what happens when the verb is not the frame-evoking element, such as when it is a support verb? Consider the following examples from the `Revenge` frame.

(3.4) a. [<Time>After the murder of her son] [<Avenger>the mother] was [taking SUPP] revenge[tgt] [<Offender>on the thugs who killed him].
b. [<Avenger>The scolded woman] [took SUPP] [<Degree>awful] revenge[tgt] [<Offender>on her unfaithful husband].

In the above examples, *take* is treated as a support verb, since (3.4) clearly reports acts of revenge and not of taking; that is, the `Revenge` frame is evoked by the noun *revenge*. Ruppenhofer et al. argue that the verbs do not 'introduce any significant semantics on their own' (2010: 37) and that the noun *revenge* selects the support verb and not the other way around. Observe (3.5).

(3.5) a. [<Arguer1>Peter] and [<Arguer2>Paul] [had SUPP] [<Manner>a really bad] argument[tgt].
b. [<Addressee>At the last meeting] [<Arguer>Peter] [made SUPP] [<Manner>a really good] argument[tgt].

The examples in (3.5) show that the noun *argument* can take different support verbs depending on the frame the noun evokes. In (3.5a), for example, *argument* takes the

support verb *have* and has a meaning of conversation, while in (3.5b) *argument* takes *make* as its support verb with a meaning related to reasoning.[57]

In (3.4) it is the noun *revenge* and in (3.5) the noun *argument* that evokes the respective frames. This means that the TARGET shifts from the verb to the noun as illustrated in (3.6), where the verb *argue* (labeled tgt) in the BVC usage (3.6a) is the frame-evoking element, and in the SVC in (3.6b) the noun *argument* evokes the frame and becomes the TARGET (tgt).[58]

(3.6) a. [<Arguer>Paul] *argued*[tgt] [<Manner>really well] [<Addressee>(at the last meeting)].
b. [<Arguer>Paul] [made SUPP] [<Manner>a really good] argument[tgt] [<Addressee>(at the last meeting)].

While in (3.6a) the frame evoked by the verb *argue* is dominant, it is the frame evoked by the noun *argument* in (3.6b) that is dominant, since the meaning of the sentence is clearly that of reasoning and not making.

In the next section, I turn to event-based frame semantics and argue that a modified event-based Frame Semantics approach offers the analytical tools necessary to specify what types of selectional restrictions apply to nouns in SVCs with *geraten*.

[57] There is also a change in the evoked frame. Example (3.5a) evokes the `Quarreling` frame, while (3.5b) (and (3.6) below) evoke the `Reasoning` frame.
[58] The shift in frame-evoking element is due to the framework I am working in. I.e. FrameNet handles support verb in this specific manner.

3.2.4 Event-based Frame Semantics

Even though event-based Frame Semantics, proposed by Boas (2003), was introduced with resultatives in mind, it can be adapted to provide (more) detailed information regarding selectional restrictions in SVCs. This section provides a brief overview of event-based Frame Semantics. In the following chapters, I adapt and modify event-based Frame Semantics to show that it allows for a finer grained analysis of semantic criteria of selectional restrictions imposed on the noun in SVCs with *geraten.*

Boas (2003) proposes this modified approach to Frame Semantics in order to account for resultative senses of verbs, which are not derivable from the prototypical senses, since resultatives require more encyclopedic information than is given in the traditional lexical entry of verbs. Boas (2003: 159) takes a "splitting approach towards the description of verbal semantics" and argues that each verb sense is represented with its own packet of idiosyncratic semantic information, or event-frame. Event-frames include information pertaining to the event participants, force-dynamic relationships between the event participants, temporal information, world knowledge, and information concerning collocational specifications of a verb. He argues that word meaning consists of at least two components. One component is towards the lexical pole and the other towards the encyclopedic pole of the meaning continuum.[59] It is also not always possible to divide these meanings into clearly definable categories, as "the relative degree of each

[59] The two poles of the meaning continuum are knowledge (immediately linguistically relevant) and encyclopedic knowledge/world knowledge (e.g. customs, mores, social behavior). For example, little encyclopedic knowledge is required to understand *Bert ate a cake*; however, encyclopedic knowledge is necessary to correctly interpret *Bob ran on the first day of the week*, because what constitutes the first day of the week is culturally defined.

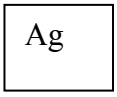
meaning component [that] is needed for the interpretation of a word crucially depends on the contexts in which the word is used" (Boas 2003: 171). This means that each event-frame contains two types of frame semantic information. The first type is lexical meaning or 'on-stage information' tending towards the lexical meaning pole of the continuum and includes conceptually relevant information about the event-frame. In other words, 'on-stage information' is "immediately linguistically relevant for the interpretation of the meaning denoted by an event-frame" (Boas 2003: 172). The second type of information encoded in the event-frame is world knowledge, which Boas (2003: 172) terms 'off-stage information', since it is "not immediately relevant for the construal of an utterance." This 'off-stage information' is subconsciously accessible, since it is by default associated with a given word. The interaction between on-stage and off-stage information is characterized by Boas (2003) as an interplay of conceptually irrelevant information, such as the fact that westerners use shoes to run or that running includes the usage of legs and feet in the prototypical sense of run (passive knowledge), and the on-stage knowledge of a specific sense of a word such as the fact that running involves a runner and a movement from point A to point B. Since off-stage information is known sub-consciously, it is stored with conceptually relevant on-stage information of a specific sense in memory. This interplay is also described by Allan (1995: 294) as follows:

> The lexicon entry is one access point into the isomorphic set of encyclopedia entries, all of which are activated by recognition of the listeme. If the encyclopedia is a data-base, then the lexicon forms an integral component of the encyclopedia.

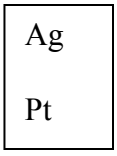
Contained in the event-frame is information regarding the event participants, temporal, spatial and force dynamic relations, as well as information about off-stage knowledge, world knowledge and prototypical outcomes of events.

Each event-frame contains slots for source, path and goal. The information contained in the event-frame for event participants, like agent and patient, deals with the number and semantic type of the participants. Depending on the number of event participants, the event-frame includes information about one or more participants. The prototypical sense of one-participant verbs like *sneeze*, *run* or *sing*, includes information about the agent (3.7), while two-participant verbs like *break*, *shoot* or *paint* contain information about two participants, the agent and the patient (3.8). Simplified event-frames illustrating the event participants for both types of verbs are given below (cf. Boas 2003: 175).

(3.7) One participant verbs (e.g. *run*)



(3.8) Two participant verbs (e.g. *paint*)



Turning to a more in-depth analysis of event-based frame semantics, I focus my discussion on the event-frame of the two participant verb *paint* with the representation of the prototypical sense of *paint*, including world knowledge (W), given in (3.9).

(3.9)

GOAL
Ag (W p2) Pt (p3)

Ag: Entity applying paint to a surface
Pt: Surface or object that is construed as exhibiting a surface
p3: SYN: AP, NP or PP
SEM: denoting a color or a property associated with the prototypically intended end result of applying paint to a surface (Boas 2003: 224)

The prototypical sense event-frame of *paint* in (3.9) includes information about the semantic and pragmatic restrictions concerning the Agent (Ag) and Patient (Pt), as well as the possible end result states indicated by (p2) and (p3). The specification (p3) illustrates that the end result is also sub-categorized; in this case, *paint* allows APs, NPs, or PPs. The brackets surrounding (p3) indicate that this specification is optional and does not have to be realized at the syntactic level. Similarly, W, standing for all world knowledge associated with the prototypical painting event, is also optional. In sum, Boas (2003) argues that the lexical entry of verbs needs to be expanded to include event-frames, making it able to cover all relevant senses of a given verb. In this view, the lexical entry of a verb consists of the verb and a set of event-frames. These event-frames

capture the different verb senses regarding resultative constructions. In addition, on- and off-stage information is both implicitly activated by an uttered verb and common background knowledge is needed to understand the event participants. However, off-stage information can be syntactically realized in order to convey more information about an event encoded by the event-frame.

3.3 Conclusions

In this chapter, I first discussed Frame Semantics as proposed by Fillmore (1975, 1982) and showed how Frame Semantics is implemented in FrameNet. The discussion about frame to frame relations, in particular the discussion about frame inheritance, showed how more specific instantiations of frames are related to their parents and to each other. This information becomes important in Chapter 5, where I argue for a parent-child relationship of the third central sense of *geraten* and the sub-senses of *geraten* as a SV.

I also discussed event-based Frame Semantics as advocated by Boas (2003), which provides a more fine-grained model in order to capture the differences in meaning and communicative function of SVCs and its paraphrases. This approach allows to capture more detailed information about situations which holds between the Frame Elements of a frame. In the next chapter, I turn to the form of SVCs, including Construction Grammar (CxG), and ask how these different meanings and different forms might be connected to each other syntactically.

Chapter 4

Relating Meaning to Form

4.1 Introduction

This chapter investigates the form side (syntax) of SVCs with *geraten*. Construction Grammar (CxG) proposes that a change in meaning also implies a corresponding change in form. By exploring the form side of SVCs with *geraten*, I intend to show the connection between the central senses of *geraten* and *geraten* as a support verb, in order to explore possible selectional restrictions that arise from a meaning shift of *geraten* from full verb to support verb. In Section 4.2, I present Goldberg's version of Construction Grammar, specifically her analysis of the ditransitive construction. This discussion provides the theoretical background for my own analysis of the three senses of *geraten* when used as a SV in Chapter 5. Section 4.3 takes a closer look at the form side of the three central senses of *geraten* as discussed in Chapter 4. This discussion shows how the different senses of *geraten* are related to each other. In Section 4.4, I summarize my findings regarding the three prototypical meanings of *geraten*.

4.2 Construction Grammar (CxG)

One major benefit of Frame Semantics is that it comes with a corresponding theory of grammar, namely Construction Grammar (henceforth CxG), which proposes that it is possible to model all facets of a speaker's knowledge about the language (see Kay (1995), Fillmore & Kay (1996), Nemoto (1999), Sag (2001), and Fried (2008), among

others). While other theories differentiate between areas of grammar such as core and periphery (Chomsky (1957, 1981, 1995), Radford (1988), and Haegeman (1994)), CxG does not assume such theoretical distinctions, but is instead interested "in characterizing the *entire* class of structures that make up language" (Goldberg 1995: 6). At the heart of CxG lies the notion of the linguistic sign (de Saussure 1916),[60] which posits that each form is associated with a specific meaning. Such form-meaning pairs are called constructions, and both license and constrain each other. Goldberg (2006: 5) provides the following definition of a construction.

> Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.

In a constructional approach, constructions are taken to be the basic units of language and a new construction is posited if the meaning and/or form of a pattern cannot be derived compositionally from other constructions already existing in the language. In CxG there is no strict separation between the lexicon and syntax and all form-meaning pairs have the same theoretical status. Goldberg's (1995, 2006) view of CxG is best illustrated by her discussion of the ditransitive construction,[61] which contributes semantics that are not directly associated with lexical items like the verbs in (4.1a-d).

[60] de Saussure (1916) argued that every sign has two sides that are inseparable. The signifier, or the 'shape' of a word, its phonic component, i.e. the sequence of phonemes, and the signified, the concept or object that appears in our minds when we hear or read the signifier. In essence, the 'word' (signifier) and the 'picture' (signified) that represents that word make up the sign.

[61] For a more in-depth analysis of the ditransitive construction, see Goldberg (1995: 141-151).

(4.1) a. Sally baked her sister a cake.
b. Mary gave Joe a kiss.
c. Mary's behavior gave John an idea.
d. Joe painted Sally a picture. (Goldberg 1995: 141-143)

It is clear that the expression in (4.1a) "can only mean that Sally baked a cake with the intention of giving it to her sister" (Goldberg 1995: 141). She observes that the meaning of (4.1a) neither implies that Sally bakes the cake so her sister would not have to, nor is it a demonstration of Sally's cake-baking skills. It can only be asserted that Sally intended to give her sister the cake, but it does not necessarily mean that Sally gave or will give the cake to her sister. This observation leads Goldberg to argue, that the ditransitive construction contains an "intended transfer" aspect of meaning, that cannot be attributed to the sense of *bake* alone, since that would force us to claim that *bake* itself means something like in (4.2). Assigning the meaning of "intended transfer" to the ditransitive construction helps avoid implausible word senses.

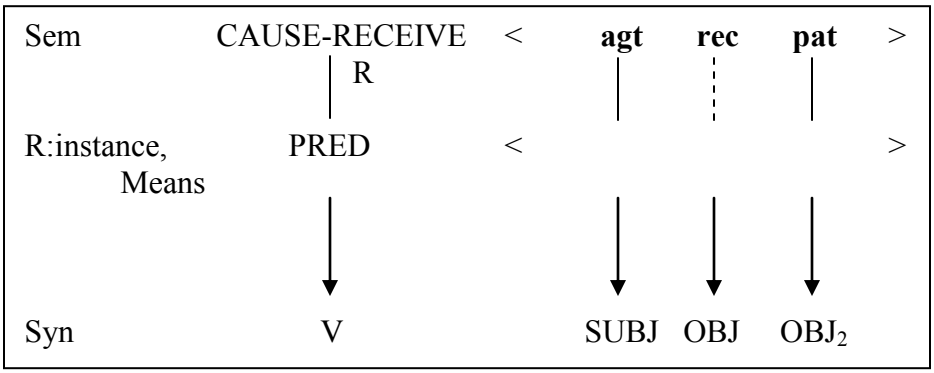
(4.2) X intends to cause Y to receive Z by baking. (Goldberg 1995: 141)

Positing such a verb sense would disallow meanings of *bake* in which there is no intended transfer, and sentences like (4.3) would be misinterpreted in that the wedding is now the recipient of the cake baked by Sally. However, it is obvious that the wedding is not the intended recipient of the cake, but the couple getting married.

(4.3) Sally baked a cake for the wedding.

On Goldberg's CxG account, the ditransitive construction is an independently existing construction in English, because it is not predictable from other constructions in the language. Although the verb in (4.1) contributes the base meaning, it is the independently existing meaningful ditransitive construction that contributes the additional argument, which in turn provides the final interpretation of "intended transfer". Figure (4.1a-b) illustrates how the semantics of the ditransitive construction and the verbal semantics of *bake* fuse to form the ditransitive interpretation as in Figure (4.1c).

Figure (4.1) a. Ditransitive Construction



(cf. Goldberg 1995: 142)

b. bake: **< baker, baked >**
c. Martin baked Amanda a cake.

The top layer of the ditransitive construction in Figure (4.1a) represents the meaning (Sem) and includes its semantic arguments (constructional roles) and also shows the

relationship of the different semantic arguments to each other. Figure (4.1a) indicates the semantics of the ditransitive construction as 'X CAUSE Y TO RECEIVE Z'. Solid lines between the argument roles and the verb's participant roles indicate roles that must be obligatorily fused. Role participants in bold are 'profiled' participants and represent the verbal semantics.[62] In the ditransitive construction, the <agt> and the <pat> roles need to exist independently. A dotted line indicates participant roles that can be added by the construction. The verb's participant roles fuse into the open slots in the middle line of the construction and are intended as frame-semantic representations of the meaning of the verb.[63] Goldberg (1995) argues that meaning in CxG is defined with respect to some background frame or scene. For example, the difference in meaning between *land* and *ground* lies in the different background frames. That is, "*land* designates the dry surface of the earth as it is distinct from the *sea*, whereas *ground* designates the dry surface of the earth as it is distinct from the *air* above" (Fillmore 1982: 121). Similarly, rich frame-semantic knowledge is needed in order to describe the meanings of words like *divorce* and *roof*. Finally, the bottom line illustrates the syntactic realization of the combined arguments of the verb and the construction.

Figure (4.1b) represents the lexical entry for *bake* and shows that the verb is associated with two participant argument roles in Figure (4.1c), the 'baker' (*Martin*) and

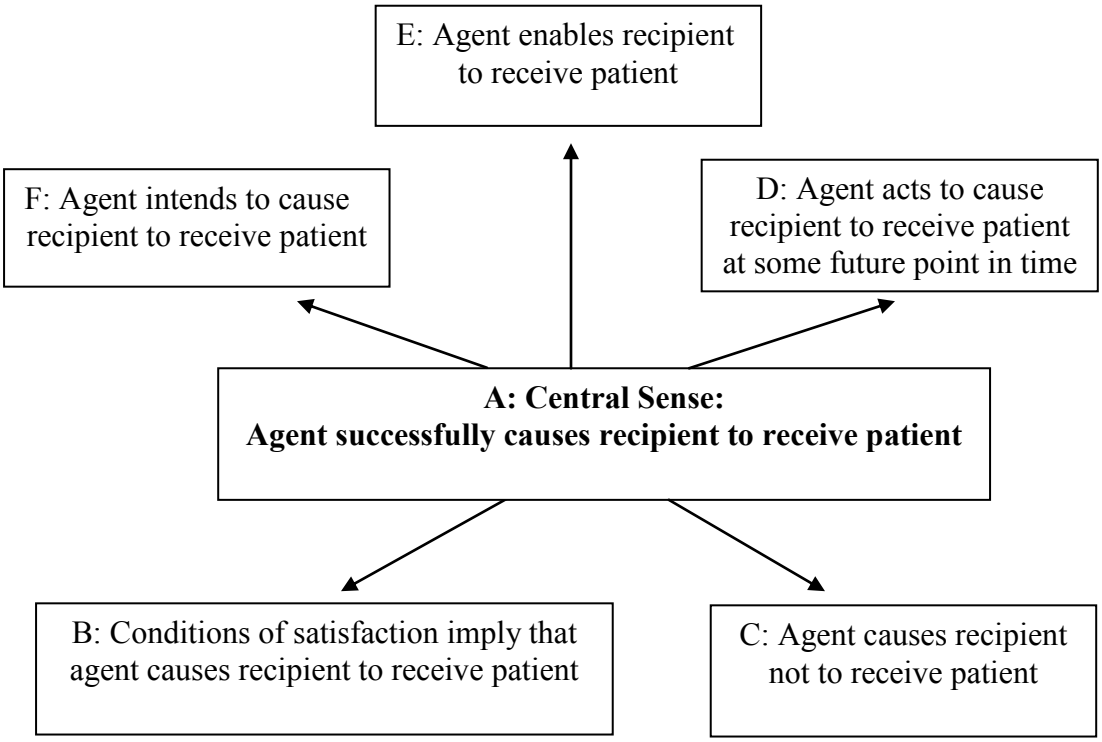
[62] According to Goldberg (1995: 45), the semantic difference in profiled participant roles of *rob* and *steal* accounts for the difference in the expression of their arguments. *Rob* profiles the thief and the target, but not the goods **rob**<**thief target** goods> and *steal* profiles the thief and the goods, but not the target **steal**<**thief** target **goods**>.

[63] Many researchers, such as Foley & Van Valin (1984), Levin (1985), or Pinker (1989), do not capture all the intuitive meanings of a verb; instead they capture the "syntactically relevant aspects of verb meanings" (Goldberg 1995: 29). In a constructional approach to language, the mapping between semantics and syntax is done through constructions and not via lexical entries.

the 'baked' (*cake*). When *bake* fuses with the ditransitive construction, the verb (*bake*) contributes the baker (agent) and the baked (patient) roles, whereas the construction contributes a recipient role to the verb's semantics. This means that the CAUSE-RECEIVE relation is achieved through the argument structure provided by *bake*. The interpretation of *Martin caused (with intent) Amanda to receive a cake by baking* in Figure (4.1c) is achieved through the construction that provides the rest of the semantics for this reading to emerge. In other words, the semantics of the ditransitive construction and the semantics of the transitive verb *bake* are fused to allow for the ditransitive interpretation. Goldberg (1995: 33) claims that the ditransitive construction exhibits constructional polysemy[64] because "the same form is paired with different but related senses." From Goldberg's perspective, it is possible to capture both the central sense of the ditransitive construction (X CAUSES Y to RECEIVE Z) as in Figure (4.1), and also all the other senses associated with the ditransitive meaning like (X INTENDS TO CAUSE Y to RECEIVE Z) or (X CAUSES Y not to RECEIVE Z). The various extended meanings of the ditransitive construction are illustrated in Figure (4.2).

[64] Constructional polysemy does not make the construction more complex and avoids having to attribute polysemy to the verb, i.e. it takes into account polysemy that "exists independently of our decision as to how verb meanings should be represented, since it corresponds to polysemy across outputs of what is generally taken to be a single lexical rule on traditional accounts" (Goldberg 1995: 37).

Figure (4.2) Polysemy of the Ditransitive Construction (Goldberg 1995: 38)



The sentences in (4.4) exemplify each of the senses of the ditransitive construction illustrated in Figure (4.2).

(4.4) a. Bill gave Mary flowers for her birthday.
b. Bill promised Mary a horse.
c. Bill refused Mary her monthly allowance.
d. Bill left Mary $1,000,000 in case of his death.
e. Bill allowed Mary to withdraw $10,000 from her educational fund.
f. Bill baked Mary a cake.

According to Goldberg, the central sense of the ditransitive construction (4.4a) involves the meaning of successful transfer of an object to a recipient. In (4.4a), this means that

Bill gave Mary the flowers and that Mary also received the flowers. Goldberg claims that the non-central sense in (4.4b) is different, in that it contains the satisfaction condition, i.e. that the transfer only occurs if Bill delivers the horse to Mary. Similarly, in (4.4d) Mary receives one million dollars in the event that Bill dies. Here, too, Bill intends for Mary to have the money. Example (4.4c) differs from these other senses in that Bill intends Mary not to have money, according to Goldberg. Thus, the intended transfer of the object to the patient is refused. In (4.4e), Bill enables Mary to withdraw funds from the educational account. The act of allowing by Bill is enabling Mary to get to the money. Finally, (4.4f) can only be understood with the meaning that Bill intended for Mary to have the cake. As Goldberg (1995: 141) notes, "unless we associate the 'intended transfer' aspect of meaning to the construction, we are forced to say that *bake* itself means something like 'X intends to cause Y to receive Z by baking'." However, associating such a meaning with the verb *bake* serves only to avoid associating the meaning with the construction. In Goldberg's (1995) view, each of the extended senses is motivated by the central sense, because they inherit the syntactic structure from the central sense and differ only minimally in meaning from the core construction.

While Goldberg's constructional account has been quite influential over the past decade, certain problems have been pointed out by Kay (1996, 2005), Iwata (2008), Nemoto (2005), and Boas (2003). For example, Boas (2003, 2005) argues that Goldberg's (1995) abstract constructions are sometimes too powerful and therefore overgenerate unacceptable sentences. This is due to the fact that Goldberg must state her constraints at the constructional level because she claims that "arguments associated with

the construction are imposed on the semantics directly associated with the predicates" (Goldberg 1995: 221). More precisely, Boas (2005: 106) shows that the "architecture of lexical entries presented by Goldberg does not have any features that may block a verb's integration into a construction on formal grounds." From this view point, there is no principled way to block straightforwardly the integration of a verb into a construction. Consider the following examples, taken from Boas (2005), which illustrate his argument and criticism of Goldberg (1995).

(4.5) a. ?He wiped the table dirty.
b. *He spoke himself blue in the face.
c. *He whispered himself blue in the face.
d. *He grumbled himself blue in the face.
e. *He grouched himself blue in the face. (Boas 2005: 105)

Boas (2005) points out that Goldberg's (1995) account would generate sentences in (4.5) through the fusion with lexical entries of the type in (4.6).[65]

(4.6) a. wipe < **wiper** wiped >
b. speak < **speaker** >
c. whisper < **whisperer** >
d. grumble < **grumbler** >
e. grouch < **groucher** >

Goldberg argues that the semantics of both the construction and the verb combine to yield the semantics of the expression. She posits that, the construction provides the additional

[65] Goldberg lists the lexical entries for *wipe* and *talk* as wipe <**wiper** wiped> and talk <**talker**>, respectively.

arguments for the predicates in (4.6), which necessitates that frame semantic information of the verb provides information to rule out certain combinations. Since both the structure of the lexical entries of the verbs and the construction that combines with the verbs are the same,[66] there is no means for the construction to decide whether additional argument roles can be added to the semantics of the verb. Therefore, Goldberg's account does not constrain generation of unacceptable sentences. Boas (2003, 2005) therefore proposes 'mini-constructions' or event-based Frame Semantics (cf. Section 3.2.4). Boas' proposal has the advantage over Goldberg's account, in that it is able to restrict the generation of unacceptable resultative constructions.

So far I pointed out how the ditransitive construction provides an additional argument that allows for the intended transfer interpretation for *bake.* This allows Goldberg to avoid implausible word senses, e.g. attributing an intended transfer sense to the verb *bake*. Goldberg's constructional account has also certain problems, most notably that the abstract constructions are sometimes too powerful and overgenerate unacceptable sentences (Boas 2005). In the following sections, I use CxG to show the correlation between meaning and form of SVCs and that it is possible to associate different meanings with the third central sense of *geraten* which allows me to capture the meanings of SVCs with *geraten* (i.e. SVCs with *geraten* are comparable to the associated meanings of the ditransitive construction in that they are metaphorical extensions from a central sense). As Goldbergian constructions overgenerate, I adopt Boas' event-based Frame Semantics with modifications to account for such overgeneration.

[66] The only difference is that the frame roles are labeled differently.

In the following sections, I turn to the form side of the base meanings of *geraten* and the SVCs with *geraten*. In Section 4.3.3, I provide a more in-depth description of the pattern of the third base verb meanings of *geraten*.

4.3 The meanings of the central senses of *geraten*

In this section, I take a closer look at the meaning of the central senses of the German verb *geraten* to find out what kinds of selectional restrictions apply to the noun in SVCs with *geraten*. First, I provide dictionary definitions of *geraten* and then I discuss the unintentional change with motion sense (third central sense) of *geraten* as a BVC, which serves as the basis for my in-depth analysis of the meanings of SVCs with *geraten.* This section also includes a frame-semantic analysis of the third BVC sense of *geraten* with a discussion of the selectional restrictions for that specific sense. For convenience, I again provide examples of the central senses of *geraten* in (4.7).

(4.7) a. [<Created_entity>Der Kuchen] gerät[tgt] [<Cause>mit
the[ARD.SG.M] cake:SG;M gets:3SG with:PRPD
dem neuen Rezept].
the:ARD;SG;DAT;N new:ADJ;SG;DAT;N recipe:SG;N.
'With the new recipe, the cake turns out great.'

b. [<Entity_1>Das Kind] gerät[tgt] [<Entity_2>nach
the[ARD.SG.N] child:SG;N gets:3SG after:PRPD
dem Vater].
the:ARD;SG;DAT;M dad:SG;M.
'The child is taking after the father.'

c. [<Theme>Das Auto] gerät[tgt] [<Goal>in die
the[ARD.SG.N] car:SG;N gets:3SG in:PRPE the:ARD;SG;ACC;F
Scheune].
barn:SG;F.
'The car ends up in the barn.'

I compare the entries for *geraten* in three dictionaries in order to establish the central senses. It is rarely a problem when words have more than one meaning, e.g. the *bank* of a river and the *bank* as a monetary institution, because we are able to select the right sense of a word using contextual cues.[67] Dictionaries list all the different senses of a word as sub-parts of the respective entry of a word that provides a good approximation of meaning.[68] The following discussion about dictionary entries of *geraten* serves two purposes. First, it illustrates the different meanings of *geraten* as base verb and as support verb. Second, it serves as the basis for the determination of the primary and the extended senses (cf. Cruse 1986) as they are used in the remainder of this dissertation. The identification of primary and extended senses is tricky, because it is difficult to establish which sense should count as basic (central), and even among established senses there is a degree of centrality.[69] First, I examine the definitions of *geraten* in *Duden: Das grosse Wörterbuch der deutschen Sprache (Duden)*, *Wörterbuch der deutschen Gegenwartssprache (WDDG)*, and *Deutsches Wörterbuch (DW)*. I have chosen these three dictionaries because they provide similar descriptions of *geraten*. The entries for the verb *geraten* are given in (4.8) - (4.10).

[67] For more information on polysemy, see Cruse (1986), Geeraerts (1993, 1994), Ravin & Leacok (2000), and Fillmore & Atkins (2000), among others.
[68] The comparison below follows the methodology employed by Fillmore & Atkins (2000).
[69] For more information on this topic see Cruse (1986) or Croft & Cruse (2004) among others.

(4.8) *Duden* entry for the verb *geraten*: [70]

1. **a) ohne Absicht, zufällig an eine bestimmte Stelle, irgendwohin gelangen [u. dadurch Nachteile erfahren, Schaden erleiden]**: in eine unbekannte Gegend, in ein Gewitter g.; das Auto geriet beim Schleudern an die Leitplanke

   b) in einen bestimmten Zustand, eine bestimmte Lage kommen: in Schulden, in eine gefährliche Situation, in eine Krise, in Not, in Verruf, in Schwierigkeiten g.

2. **a) gelingen, gut ausfallen:** der Kuchen ist heute geraten; seine Kinder geraten (entwickeln sich gut);

   b) am Ende einer Herstellung bestimmte Eigenschaften aufweisen, ausfallen: das Essen ist [ihr] gut, schlecht geraten; das Brettchen geriet ihm sehr breit (Strittmatter, Wundertäter 185)

3. (einem Eltern od. Grosselternteil) **ähnlich werden**: er gerät nach dem Vater.

The *Duden* lists three sense for *geraten* of which sense one and two have sub-senses. The two sub-categories of the first sense describe instances in which someone or something either undergoes an unintentional motion or gets into a specific state or situation. The first sub-sense of sense one involves the unintentional arrival at a place and by doing so incurring some disadvantage or harm, such as getting caught in a thunderstorm or being run over by a car. The second sub-sense includes meanings expressing that someone or something is getting into a specific state like starting to burn or a specific situation like in debt. The second sense describes instances that can be summarized as something or someone turning out well or not well, e.g. a well made cake. The first sub-sense refers to instances in which cooking/baking is successful or children mature well. The illustration of the second sub-sense refers to things that can be manufactured or created and exhibit

[70] See Appendix B.1 for a translation and full dictionary entry.

certain characteristics, e.g. the manufacturing of a slab of wood or the successful/unsuccessful preparation of a meal (*das Essen ist geraten/nicht geraten* ('the food turns out well/not well')). Finally, sense three describes instances in which a person exhibits similarities to another person, generally a close relative.

Next, consider the corresponding entry of *geraten* from the DW: [71]

(4.9) *DW* entry for the verb *geraten*

1 es bezeichnet das zufällige Ergebnis einer Bewegung und berührt sich dabei mit *kommen*; *das sie nicht ins Hause geriet* Goe., übertr. zur Bez. einer Entwicklung, präp. mit nach zur Bez. von Ähnlichkeit: *nach den eltern gerathen* (1570; DWb); im festen Gefüge: *in Gefahr, Noth gerathen* (Steinbach), *in Brand gerathen* (Kramer)

2 **a)**>sich entwickeln<: *es soll dir nicht zur Missetat g*. Lu.

b)>gelingen<, auf Kinder bezogen: *geret .. eine Tochter bas/denn der son* (Lu. Sir. 36,23)

Entries in the *DW* for *geraten* include two senses with the second having two sub-senses. The first sense illustrates the result of an accidental motion. It also includes the figurative sense of formation/development (i.e. taking after a parent) as well as instances of fixed expressions like getting into danger or getting into debt. The second sense is divided into two sub-senses of which the first indicates a development and the second again refers to the development of children or events like the cooking of potatoes.

Now consider the following entry of *geraten* in the *WDDG*:

[71] See Appendix B.2 for a translation and full dictionary entry.

(4.10) *WDDG* entry for *geraten*: [72]

1. **gelingen**: d. Braten, Kuchen ist (mir) heute nicht g.; nach diesem Rezept gerät der Kuchen immer; *sich entwickeln*: seine Kinder g. gut; *gedeihen*: d. Korn, Wein ist dieses Jahr gut g.

2. nach jmdm. g. jmdm. **ähnlich werden**: das Kind gerät nach dem Vater, der Mutter

3. **unbeabsichtigt irgendwohin gelangen**, **kommen**
   a) in ein abgelegenes Dorf, in eine unwegsame Gegend g.; das Schiff ist auf Grund g.; in einen Schneesturm g.

   b) */übertr./* **in eine unangenehme Lage kommen**: in eine gefährliche Situation, in Gefahr g.; in Not, Bedrängnis, Schwierigkeiten g.

   c) in eine andere Stimmung kommen: in Erregung, Ärger, Wut, Zorn, Empörung, umg. Harnisch, Aufregung, Verwirrung, Angst, Eifer, Ekstase g.

   d) /drückt in abgeschwächter Bedeutung einen Beginn aus/ die Ordnung gerät aus den Fugen; das Volk geriet in Aufruhr.

The *WDDG* lists three senses of which the third contains four sub-senses. Sense one describes things that can be created, such as a cake, but also covers the sense of development (e.g. the child develops well) and of growing (e.g. the wine is turning out well this year). This sense also includes a colloquial usage referring to garments that turn out not to fit their wearer, as in a dress that was cut too short/too long. The second sense refers specifically to the similarity between child and parents, i.e. as in children taking after their parents. The third sense is divided into four sub-senses, all of which refer to an unintentional event. Sub-sense one illustrates instances in which a person or thing unintentionally ends up at a certain location. It also includes the metaphorical sense of losing one's way as expressed, for example, to become delinquent or colloquial usages as

[72] See Appendix B.3 for a translation and full dictionary entry.

in the question how you ended up with this person. The second sub-sense indicates in a figurative sense getting into an undesirable situation e.g. ending up in danger or between a rock and a hard place, while a change in emotion is expressed by the third sub-sense. Finally, the fourth sub-sense expresses in a weaker sense an onset, e.g. that the negotiations began to break down.

Several similarities and differences between the entries can be observed. Each agrees that the *gelingen* sense (succeeding), definitions 1 and 2, should be listed as its own sense of *geraten*. Similarly, the resembling sense (definition 3) is also listed as a distinct sense in each dictionary. Only the *WD* and *Duden* agree on what they identify as sense 2, although the *WD* splits sense 2 into two sub-senses (*gelingen* of a person (2b) and *gelingen* of an object (2a)), while *Duden* considers it one sense. Also, the taking after another person sense of *geraten* is assigned its own entry in each of the three dictionaries. The blossoming/flourishing sense of *geraten* is only covered by *WDDG*. The *WDDG* assigns each sense definition 5 - 8 its own sub-sense of unintentional motion, i.e. unpleasant situation, changing emotion, and expressing an onset, respectively; WD incorporates all these sub-senses under sense one. Therefore, some of the senses are only discernable through the examples provided. *Duden* also lists sense definitions 5 - 8 under the first sense of *geraten*, however, *Duden* sub-divides it into the senses involving motion (5, 9, and 10) and involving situations/emotions (6, 7, and 11). The sense of expressing a beginning (sense 8) can be inferred from the examples listed under sense one in *Duden* and *WD*. While *WDDG* lists sense definitions 1 - 3 with sub-senses explicitly, 9 - 11 can be discerned from the sub-senses listed under 3 by means of examples. I extracted the

meanings of *geraten* as listed in the three above mentioned dictionaries and collated them in such a way as to show their similarities and differences in their coverage of the senses of *geraten* similar to Fillmore and Atkins (2000) in their analysis of *crawl*. For example, personal development (meaning component 1) is listed in *Duden* as sense 2a, in *WD* as sense 2b, and in *WDDG* as sense 1. Table (4.1) shows a summary of the similarities and differences in the coverage of the verb *geraten*. The numbers under each dictionary represent the numbered definition; a number in parentheses indicates that this sense can be inferred, not overtly in the definition but by examples that follow; and '-' indicates that this sense is not covered in the dictionary entry.

Table (4.1) Comparative coverage of the verb *geraten* in three dictionaries

Meaning components	*Duden*	*WD*	*WDDG*
1 of person: develop	2a	2b	1
2 of thing: turning out	2a	2a	1
3 of things: blossom/flourish	-	-	1
4 of person: takes after another person	3	1	2
5 unintentional motion	1a	(1)	3a
6 unintentional unpleasant situation	1b	1	3b
7 unintentional changing emotion	1b	(1)	3c
8 unintentional expressing beginning	(1b)	(1)	3d
9 incidental result of motion	1a	1	(3)
10 unintentional motion with negative result	1a	(1)	(3a)
11 get into a particular situation or position	1b	(1)	(3b & c)

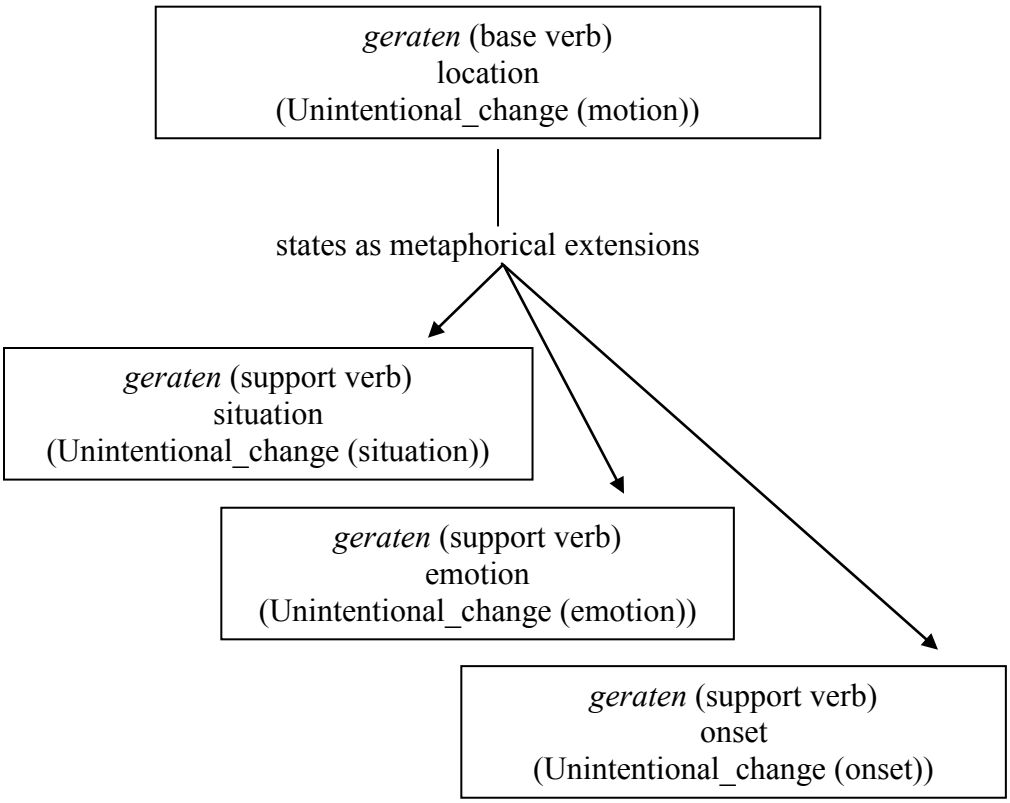
From comparing the dictionary entries in Table (4.1), it is clear that the level of detail of *geraten* in the three dictionaries differs greatly. For example, the definitions of *geraten* in the *WDDG* contain six meaning components of *geraten*, while the *WD* and the *Duden*

only have three. While the *WDDG* lists the meaning component of blossoming/flourishing as a part of sense 1, the other two dictionaries fail (maybe deliberately) to include this meaning of *geraten*.

With this list covering the senses of *geraten* in mind, I briefly turn my attention to the question of sense relations between senses 3a - 3d, i.e. I discuss which sense should be regarded as the central sense,[73] and which one(s) as the extended sense(s). It is assumed that the meanings of *geraten* as support verb are historically related to *geraten* as base verb (by process of semantic bleaching). I will refer to *geraten* when used as support verb as a metaphorical extension of the base verb meaning. Figure (4.3) depicts the meaning relations of *geraten* as base verb and as support verb.[74]

[73] Central senses are also termed primary lexical units by Cruse (1986).
[74] Goldberg (1995) argues that many verbs of directed motion can be used metaphorically to encode changes of state.

Figure (4.3) Meaning relation of *geraten* as base verb and support verb



Observe that *geraten* as base verb in Figure (4.3) represents sense 3a and the three expressions listed under states as metaphorical extensions of the base verb meaning represent senses 3b - 3d in the *WDDG*.

4.4 Relationship of SVCs with *geraten*

In this section, I illustrate how the constructional semantics and the verbal semantics fuse to render an interpretation of Unintentional_X (emotion, situation, or onset), using Goldberg's boxed notation style. The predicate (PRED) in the full verb

meaning, as well as in all sub-meanings, is *geraten*. The noun in combination with the verb *geraten* licenses the different sentential meanings attributed to SVCs with *geraten*.

Figure (4.4) Constructional polysemy of unintentional change construction

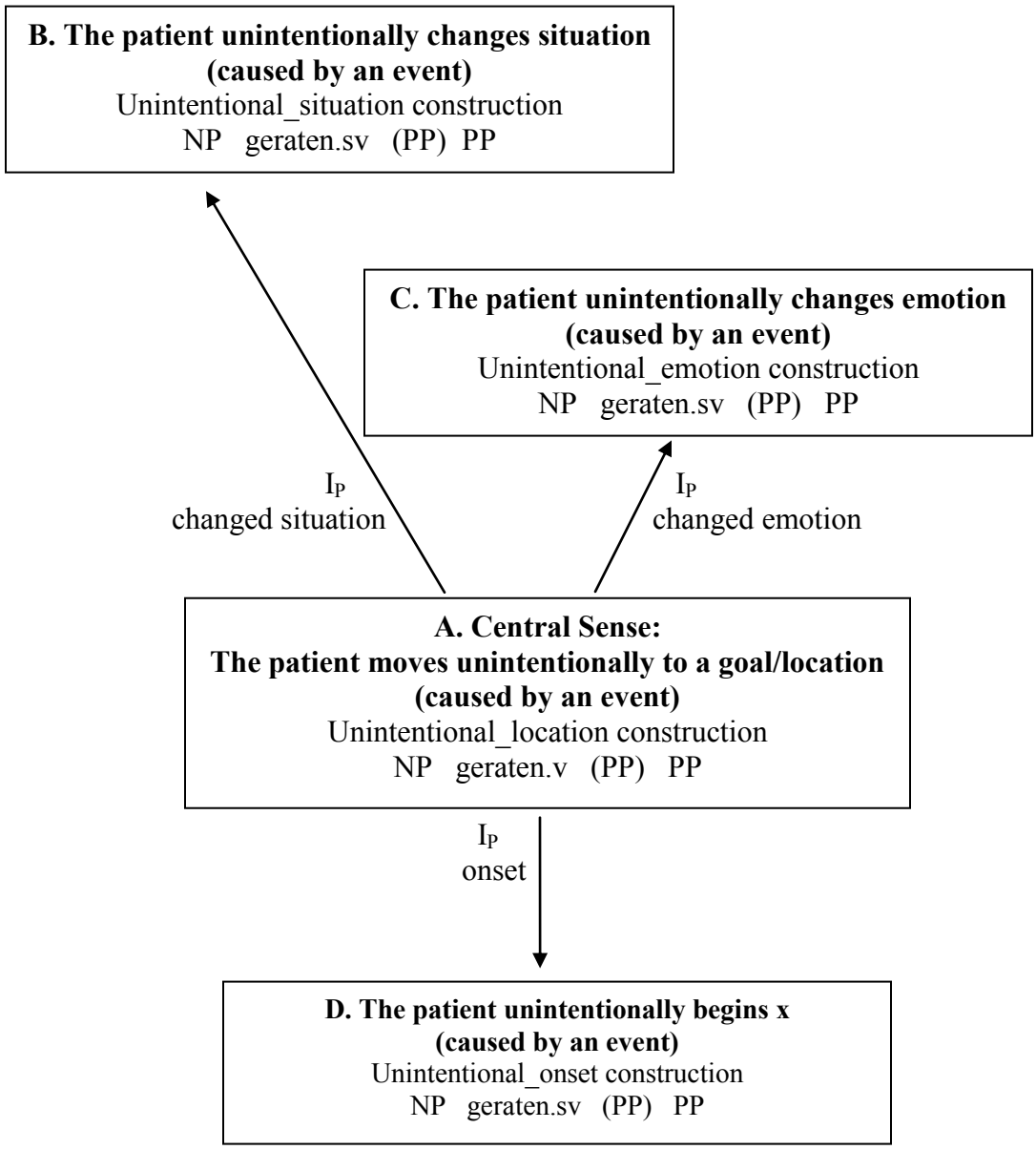
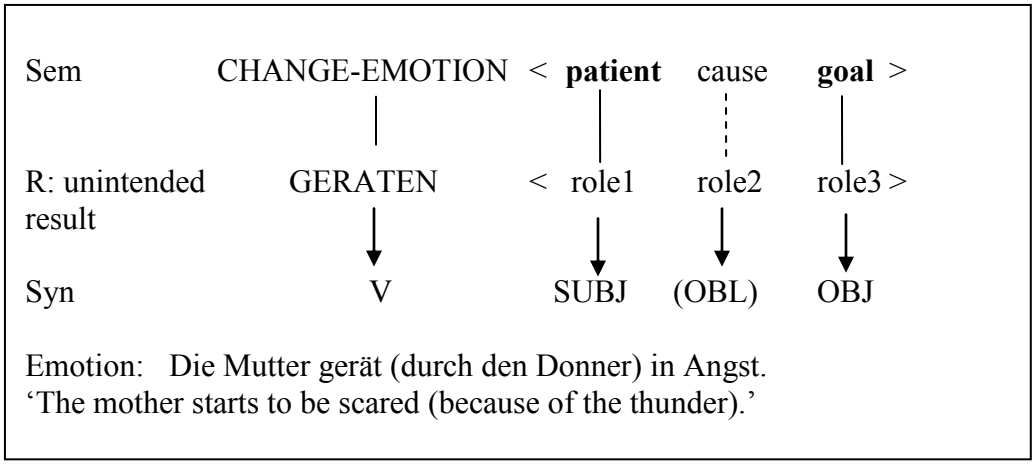


Figure (4.4) illustrates the sense relationships between the third base verb meaning and the metaphorical extensions of *geraten*. Following Goldberg (1995: 75), "inheritance links capture the fact that all nonconflicting information between two related constructions is shared. Links are treated like objects, thus extensions may be created productively." Figure (4.5) depicts the unintentional_change construction with emotion meaning as in the SVC *in Angst geraten* ('to become fearful').

Figure (4.5) Unintentional change construction (emotion)



The semantics of Figure (4.5) indicates that the patient unintentionally gets into a certain emotional state. The semantically and syntactically required arguments are in bold face while the optional argument is indicated as an oblique. The three lines in Figure (4.5) correspond to the constructional semantics, or semantic arguments (indicated by Sem) at the top, the middle line in which the verb's participant roles fuse and the overt syntactic realization of the semantic arguments in the bottom line (indicated by Syn).

The particular type of inheritance link connecting the sub-meanings (i.e. metaphorical extensions) to the central meaning of SVC with *geraten* is the polysemy link (I_P). As Goldberg (1995: 75) sates, "polysemy links capture the nature of the semantic relations between a particular sense of a construction and any extensions from this sense are inherited by the extensions; therefore we do not need to state the syntactic realization for each extension," since the sub-meanings inherit all the syntactic and semantic specifications of the central (prototypical) sense. Consider Figure (4.3) which illustrates the related sense of the SVCs with *geraten* and *geraten* as base verb (central sense). I am adopting Goldberg's argument against a lexical rule account regarding the different senses of the ditransitive construction, because on "a lexical rule account a family of lexical rules, each with a slightly different output, would need to be postulated" (Goldberg 1995: 39). I argue that because the target nouns in SVCs with *geraten* are 'responsible' for the different interpretations, I can account for the different sub-meanings of each extension by positing metaphorical extensions instead of postulating a lexical rule for each sense of *geraten*, which would also necessitate distinct senses of the support verb *geraten*. That is, the semantics of SVCs with *geraten* is due to the "interaction of the verb and the construction, thus accounting for the observed differences in the resulting semantics" (Goldberg 1995: 39).

The following metaphorical extension patterns can be observed:

1. X unintentionally causes Y to be at Z (central sense)
   Example: Der Papst gerät wegen eines Fahrfehlers ins Freudenhaus.
   'The Pope ends up in the brothel because of a driving error.'

2. X unintentionally causes Y to change situation Z
   Example: Der Mann gerät wegen seines Anlageberaters in Geldnot.
   'The man gets into financial straits because of his financial advisor.'

3. X unintentionally causes Y to change emotion Z
   Example: Die Mutter gerät wegen der dummen Fragen des Kindes in Zorn.
   'The mother gets angry because of all the child's stupid questions.'

4. X unintentionally causes Y to begin Z
   Example: Der Stein gerät wegen des Regens ins Rutschen.
   'The boulder starts to slide because of the rain.'

As the above analysis shows, following a Goldbergian framework parallel to the analysis of constructional polysemy of the ditransitive construction, polysemy links are posited between the central sense and the support verb senses of *geraten*.

However, following Goldberg's ditransitive analysis makes it necessary to assume four constructions, each with its own meaning for each of the senses of *geraten*. My analysis shows that nouns acting as placeholders in the NP^{tgt} slot are highly idiosyncratic. Pursuing a line of argumentation according to Goldberg's analysis of the ditransitive construction would lead me to assume that SVCs with *geraten* are realized as three constructions with three different meanings but with the same syntax. Because the form of SVCs with *geraten* is the same for each sub-meaning and the meaning change depends only on which noun occupies the NP^{tgt} slot, it is simpler to posit a single construction -

the unintentional_change construction. For example, changing the noun in the second NP slot in (4.11) below also changes the meaning of the SVC.

(4.11) a. Der Mann gerät in-s Schwitzen.
[ARD:M] man:SG;M gets:3SG in:PRPE-the:ARD;ACC;SG;N sweating:SG;N.
'The man starts to sweat.'

b. Der Mann gerät in Angst.
the[ARD:M] man:SG;M gets:3SG in:PRPE fear:SG;F.
'The man becomes fearful.'

My analysis differs from Goldberg's ditransitive polysemy network in that the general unintentional_change construction is able to account for all the meanings of *geraten* as full and support verb and where the different meanings of location, emotion, situation, and onset are lexically filled. The general unintentional_change construction is illustrated in (4.12).

(4.12) 'NP comes to be in a state denoted by NP^{tgt}'

$[NP_{Patient}]\ [V_{geraten}]\ ([PP_{Agent}])\ [NP^{tgt}_{Result}]$[75]

The relationship laid out in (4.14) between the third central sense of *geraten* and *geraten* as support verb is illustrated in (4.13).

[75] The notation $[V_{geraten}]$ in the unintentional_change construction is used to indicate both full and support verbs.

(4.13) a. *geraten* as full verb:

NP *geraten* in NP^{tgt} (location) → motion predicate

b. *geraten* as support verb:

NP *geraten* in NP^{tgt} (situation) → inchoative state predicate

NP *geraten* in NP^{tgt} (emotion) → inchoative psych predicate

NP *geraten* in NP^{tgt} (onset) → inchoative 'onset' predicate

Example (4.13) illustrates how the meaning of SVCs with *geraten* changes depending on the noun that occupies the NP^{tgt} slot. The distinction between full and support verb is not encoded in the meaning of the construction, but instead depends on the NP^{tgt} noun. Such an approach allows me to simplify the relationship between the meanings of SVCs with *geraten* and *geraten* as full verb without losing any predictability of which nouns can fill the NP^{tgt} slot.

I argue that senses 1, 2, and 3a of the *WDDG* are the central senses of *geraten*, while senses 3b - 3d in the *WDDG* are the extended senses[76] because *geraten* as SV is a more specific usage of *geraten* than *geraten* in the third central sense. Based on the discussion above, I propose that sense 3a[77] is the central sense and that senses 3b - 3d are extensions of that sense. Sense 3a of *geraten* in the *WDDG* can be paraphrased as an unintentional change in location (motion) (e.g. *Der Fahrer geriet in eine Wüste* ('The driver ended up in a desert')), while senses 3b - 3c can be paraphrased as an unintentional

[76] The distinction between central and extended sense is not a strict dichotomy - ease of activation of lexical units varies continuously. For an account against boundaries, see Deane (1988) or Geeraerts (1993), among others.

[77] Senses 1 and 2 are not relevant for our discussion, therefore I will omit them.

change in situation (3b), emotion (3c), or onset (3d). The difference between the central sense and the extended senses is thus a difference in meaning. Examples of sense 3a[78] in the *WDDG* are given in (4.14) and indicate an unintentional change with motion meaning towards a goal.[79]

(4.14) a. Der Papst gerät ins
the[ARD.SG.M] pope:SG;M gets:3SG in:PRPE-the:ARD;ACC;SG;N
Freudenhaus.
brothel:SG;N.
'The pope ends up in the brothel.'

b. Das Auto gerät (wegen Glatteis) in
the[ARD.SG.N] car:SG;N gets:3SG (because of:PRPG ice:SG;N) in:PRPE
den Fluss.
the:ARD;ACC;SG;M river:SG;M.
'The car ends up in the river because of ice.'

c. Die Expedition ist (wegen
the[ARD.SG.N] expedition:SG;F is:3SG (because of:PRPG
ihrer Dummheit) in einen
their:PRON;3SG;GEN stupidity:SG;F) in:PRPE a:ARI;ACC;SG;M
Schneesturm geraten.
snow storm:SG;M get:INF.
'The members of the expedition end up in a snow storm because of their stupidity.'

The examples above illustrate that the central use of *geraten* indicates an involuntary movement to a location, i.e. that the pope, the car, and the expedition involuntarily ended up in the predicament in which they are.[80]

The following examples illustrate the meaning component of unintentionality of *geraten*. Observe the meaning difference between the (a) and the (b) sentences.

[78] For the remainder of this dissertation, when I discuss the central sense of *geraten*, I mean the sense in which *geraten* includes the element of unintentionality, unless otherwise noted.
[79] Sense 3a in the *WDDG* corresponds to *Duden* sense 1a, but can only be deduced in the *WD* (1).
[80] I discuss the differences in more detail in the next chapter.

(4.15) a. Die Soldaten begeben sich in Gefahr
the[ARD.PL] soldiers:PL go:3PL themselves:PRON in:PRPE danger:SG;M
und sterben in einem Kugelhagel.
and:CONJC die:3PL in:PRPE a:ARI;M;DAT bullethail:SG;M.
'The soldiers get themselves in danger and die in a hail of bullets.'

b. Die Soldaten geraten in einen Hinterhalt
the[ARD.PL] soldiers:PL get:3PL in:PRPE a:ARI;SG;ACC ambush:SG;M
und sterben in einem Kugelhagel.
and:CONJC die:3PL in:PRPE a:ARI;M;DAT bullethail:SG;M.
'The solders are getting into an ambush and die in a hail of bullets.'

c. #Die Soldaten geraten in einen Hinterhalt,
the[ARD.PL] soldiers:PL get:3PL in:PRPE a:ARI;SG;ACC ambush:SG;M,
weil sie aufgepasst haben.
because:CONJS they:PRON;PL paid attention:PST;PTCP have:INF.
#'The solders are getting into an ambush, because they paid attention.'

(4.16) a. Das Auto fährt auf die linke
the[ARD.SG.N] car:SG drives:3SG on:PRPE the:ARI;SG;ACC left:ADJ;F
Fahrbahn.
drivepath:SG;F.
'The car drives into the left lane.'

b. Das Auto gerät auf die linke
the[ARD.SG.N] car:SG gets:3SG on:PRPE the:ARI;SG;ACC left:ADJ;F
Fahrbahn.
drivepath:SG;F.
'The car got into the left lane.'

c. #Das Auto gerät auf die linke
the[ARD.SG.N] car:SG gets:3SG on:PRPE the:ARI;SG;ACC left:ADJ;F
Fahrbahn, weil der Fahrer überholen
drivepath:SG;F, because:CONJS they:PRON;PL driver:SG;M pass:INF
wollte.
wanted:3SG;PST.
'The car gets into the left lane, because the driver wanted to pass.'

(4.17) a. Der Knabe läuft zwischen den Traktor
the[ARD.PL] boy:SG walks:3SG between:PRPE the:ARI;SG;ACC tractor:SG;M
und dessen Anhänger.
and:CONJC whose:PRON trailer:SG;M.
'The boy runs between the tractor and its trailer.'

b. Der Knabe geriet zwischen den Traktor
the[ARD.PL] boy:SG walks:3SG between:PRPE the:ARI;SG;ACC tractor:SG;M
und dessen Anhänger.
and:CONJC whose:PRON trailer:SG;M.
'The boy got between the tractor and its trailer.'

c. #Der Knabe geriet zwischen den
the[ARD.PL] boy:SG got:3SG;PST between:PRPE the:ARI;SG;ACC
Traktor und dessen Anhänger, weil
tractor:SG;M and:CONJC whose:PRON trailer:SG;M, because:CONJS
er Fahrrad fahren kann.
he:PRON;SG;M bicycle:SG;N driver:INF can:3SG.
#'The boy got between the tractor and its trailer, because he can ride his bicycle.'

In each of the (a) sentences, the agent performs an act intentionally, even at the risk of having a negative outcome (e.g. 4.15a). The (b) sentences describe situations in which the patients unintentionally wind up, and often have the implicit meaning that it has a negative effect on the patients. The element of unintentionality is a central element of the meaning of *geraten*. Consider the following example.

(4.18) a. Die Expedition geriet in-s
the[ARD.PL] expedition:SG;F got:3SG;PST in:PRPE-the:ARD;SG;ACC
Packeis, weil der Steuerman
packice:SG;N, because:CONJS the:ARI;SG;ACC steeringman:SG;M
die Karte nicht lesen konnte.
the:ARD;SG;F map:SG;F not:NEG read:INF could:3SG;PST.
'The expedition got into the pack ice, because the helmsman could not read the map.'

b. #Die Expedition geriet in-s
the[ARD.PL] expedition:SG;F got:3SG;PST in:PRPE-the:ARD;SG;ACC
Packeis, weil sie dahin wollte.
packice:SG;N, because:CONJS it:PRON;SG;N there:ADV wanted:3SG;PST.
#'The expedition got into the ice, because it wanted to go there.'

In (4.18a), the expedition is in trouble because the helmsman is not able to read the map. It is clear that steering the ship into thick ice is an unintentional act on part of the helmsman. However, (4.18b) is semantically unacceptable because an expedition that intentionally wants to be in thick ice does not do so by using the SV *geraten*. Instead an acceptable alternative would be *fahren* ('to drive') in order for (4.18b) to be semantically correct. The logical conclusion is that *geraten* entails unintentionality, because the main clause contradicts with the subordinate clause in that there is a semantic mismatch (also indicated in (4.15c) - (4.17c) above).

4.5 BVC sense of *geraten* as unintentional change with motion towards a location meaning

The previous two senses of *geraten* indicate either a creation or resemblance sense.[81] The third central sense of *geraten* conveys both unintentionality and motion, more precisely an involuntary change of location as exemplified by the sentences in (4.19).[82]

(4.19) a. [<Patient>Das Schiff[[geriet SUPP] [<Cause> (wegen eines
the[ARD.SG.N] ship:SG;N got:3SG;PST (because of:PRPG a:ARI;SG;GEN;M
Steuerfehlers)] [<Goal>ins Packeis[tgt]].
steering error:SG;M) in:PRPE-THE:ARD;ACC;SG;N ice:SG:N.
'The ship ends up (because of a steering error) in the ice.'

[81] I intentionally do not discuss the first (creation) and second (similarity) central senses because they are not relevant to my discussion of selectional restrictions in SVCs with *geraten*.
[82] In the third central sense *geraten* is a full verb and not a support verb. I thank Stephen Wechsler for pointing this out to me.

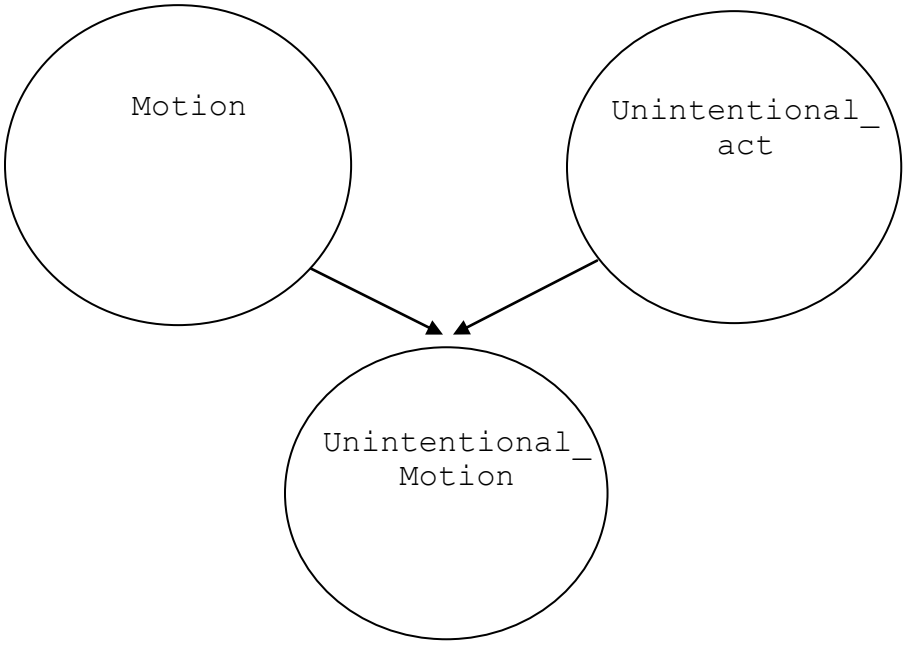
b. [<Patient>Das Auto [gerät SUPP] [<Cause> (wegen Glatteis)
the[ARD.SG.N] car:SG;N gets:3SG (because of:PRPG ice:SG;N)
in den Fluss[tgt]].
[<Goal>in:PRPE the:ARD;SG;ACC;N river:SG;M.
'The car ends up in the river (because of ice).'

c. [<Patient>Die Expedition] ist [<Cause> (durch ihre
the[ARD.SG.F] expedition:SG;F is:3SG (through:PRPA their:PRON;PL;ACC
Dummheit)] [<Goal>in einen Schneesturm[tgt]]
stupidity:SG;F) in:PRPE a:ARI;SG;ACC;M snowstorm;SG;M
[geraten SUPP].
gotten:PST;PTCP.
'The expedition ended up in a snowstorm (because of its stupidity).'

I argue that the `Unintentional_motion` frame evoked by *geraten* in (4.19) inherits meaning from two different frames (cf. 3.2.2.1) in order to express the meaning of the third central sense.[83] The first frame is the `Motion` frame in which an entity (THEME) moves from the originating place (SOURCE) along a PATH to a terminating location (GOAL). The second frame is the `Unintentional_act` frame. This frame describes situations in which an AGENT unintentionally causes a PATIENT to be affected. From analyzing the sentences in (4.19), it is clear that neither frame is capable of expressing the meaning encoded by these sentences. However, when combining elements from each individual frame (cf. 3.2.2.1) into a new one, it is possible to capture all the meaning components expressed by (4.19). The frame inheriting aspects from both frames is the `Unintentional_motion` frame. In this frame, an AGENT unintentionally affects a PATIENT, which causes the PATIENT to end up at a place (RESULT).

[83] The `Motion` and `Unintentional_act` frames are listed in Appendix C.

Figure (4.6) Composition of Unintentional_motion frame



Observe that the Unintentional_motion frame in Figure (4.6) inherits parts from the Motion frame as well as the Unintentional_act frame as discussed in chapter 3. In the Motion frame, the THEME argument is not necessarily a SELF-MOVER, it can do so volitionally. The entity moved (PATIENT) in the Unintentional_action frame does so involuntarily. The SOURCE, PATH, and GOAL FEs of the Motion frame are also present in the Unintentional_act frame, which means that the PATIENT moves from some initial location along a PATH to a GOAL. According to the *WDDG*, sense 3a of *geraten* has an unintentional motion towards a location meaning. Consider the examples in (4.20).

(4.20) a. [<Theme>Das Auto] rollt[tgt] [<Goal>in den
the[ARD.SG.N] car:SG;N rolls:3SG in:PRPE the:ARD;SG;ACC;M
Fluss].
river:SG;M.
'The car rolls into the river.'

b. [<Theme>Das Auto] rollt[tgt] unbeabsichtigt
the[ARD.SG.N] car:SG.N rolls:3SG unintentionally:adv
[<Goal>in den Fluss].
in:PRPE the:ARD;SG;ACC;M river:SG;M.
'The car rolls unintentionally into the river.'

c. [<Theme>Das Auto] gerät[tgt] [<Goal>in den
the[ARD.SG.N] car:SG;N gets:3SG in:PRPE the:ARD;SG;ACC;M
Fluss].
river:SG;M.
'The car ends up in the river.'

In (4.20a), the car rolls into the river, indicating a motion on part of the car. In (4.20b), the car unintentionally rolls into the river. The unintentional motion is conveyed by the adverb *unbeabsichtigt* ('unintentionally'). Example (4.20c) expresses a similar meaning as (4.20b), in that *geraten* conveys both motion and unintentionality. Based on the dictionary definitions and by an objective analysis of (4.20) the meaning can only come from a target LU, which evokes a frame that must indicate an unintentional motion. The `Unintentional_motion` frame inherits from the `Unintentional_act` frame that a PATIENT is unintentionally affected by an AGENT. The PATIENT and the GOAL FEs must be obligatorily realized and the PATIENT is always realized as a NP and the RESULT as a PP. The unintentionality of the act is encoded by the third central sense of *geraten* if the construction includes a location noun. The following diagram illustrates the pattern which licenses the sentences in (4.19).

Figure (4.7) Pattern of BVCs indicating an unintentional change (motion)

NP Ext	Unintentional_change	(PP)	in NP
[PATIENT]	*geraten*.V$^{\overline{tgt}}$	(AGENT)	[RESULT]

Sentences licensed by Figure (4.7) have a meaning of unintentional motion towards a location. The PATIENT FE is realized as a NP and the GOAL FE as a PP. The parentheses around the AGENT PP indicate that this argument does not have to be syntactically realized because it is either understood in context or it is irrelevant to the conversation that the AGENT caused the unintentional motion. As with the previous meanings of *geraten*, certain selectional restrictions also apply to *geraten* in the unintentional motion sense. The restrictions imposed on the PATIENT NPs and RESULT PPs are very broad and only encompass location and unintentionality. The location restriction permits all location nouns to be replaced in the sentence. Unintentionality is encoded by *geraten* and the sentence final PP contributes the necessary location meaning, which allows for the correct interpretation of the entire sentence as an unintentional change in motion towards a goal.

4.6 Frame description of evoked frame of (third) central sense of *geraten*

In this section, I discuss the frame evoked by the third central sense of *geraten*, namely the `Unintentional_motion` frame.[84] *Geraten* in this sense activates the `Unintentional_motion` frame, which contains three Core Frame Elements - the PATIENT, the AGENT, and the GOAL. In this frame the PATIENT unintentionally ends up at some GOAL, which can either be a situation or a location. This change can be caused either by an AGENT that influences the PATIENT, or the PATIENT can bring about the change himself. In either case, the PATIENT unintentionally moves to the GOAL. I now briefly describe the core Frame Elements in the `Unintentional_motion` frame.

The AGENT is the entity, sentient or not, that effects a change in the PATIENT through force, a process, or an event and does not have to be obligatorily realized syntactically.

(4.21) [$_{<Patient>}$Das Haus] [fing SUPP] [$_{<Goal>}$Feuer^{tgt}]. [$_{<Agent>}$INI]
the:ARD.SG.N house:SG;N caught:3SG;PSt fire:SG;N.
'The house caught fire.' [$_{<Agent>}$INI]

In (4.21) it is understood that the house was subject to some event which caused it to burn. Omitting the AGENT, indicated by [INI], does not inhibit the interpretation of the

[84] The following lexical units evoke this frame: *auffordern.v* ('to summon'), *eigenmächtig.a (*'arbitrary'), *erzwungen.a* ('coerced'), *geraten.v* ('to get'), *gezwungen.a* ('forced'), *gezwungenermaßen.adv* ('of necessity'), *notgedrungen.adv* ('perforce'), *notwendigerweise.adv* ('essentially'), *schuldlos.a* ('faultless'), *unbefugt.a* ('unauthorized'), *unberechtigt.a* ('unauthorized'), *unfreiwillig.a* ('involuntary'), *unwilkürlich.a* ('involuntary'), *unwillig.a* ('reluctant'), *widerstrebend.a* ('resistant'), *widerwillig.a* ('unwilling'), and *zwangsweise.a* ('compulsory').

sentence. In instances where the AGENT is omitted as in (4.21), the AGENT may be known through discourse context.[85]

Another Core Frame Element is the PATIENT, the entity that undergoes the change and must necessarily be realized syntactically in order for the sentence to carry any meaning. The PATIENT is realized as the subject.

(4.22) a. [<Patient>Das Haus] [fing SUPP] [<Cause>wegen
the:ARD;SG;N house:SG;N caught:3SG;PSt because of:PRPG
des Vulkanausbruches] [<Goal>Feuer^{tgt}].
the:ARD;SG;GEN;M volcano eruption:SG;M;GEN fire:SG;N.
'[The house] caught fire because of the eruption of the volcano.'

b. *( ) [fing SUPP] [<Cause>wegen des
*( ) caught:3SG;PSt because of:PRPG the:ARD;SG;GEN;M
Vulkanausbruches] [<Goal>Feuer^{tgt}]. [<Patient>INI]
volcano eruption:SG;M;GEN fire:SG;N.
'*( ) caught fire because of the eruption of the volcano.'

The final core frame element is the GOAL of the action undertaken by the PATIENT.

(4.23) a. [<Patient>Die Politikerin] [gerät SUPP] [<Cause>wegen
the[ARD.SG.F] politician:SG;F gets:3SG because of:PRPG
ihrer Bemerkung] [<Carrier>i-m
her:PRON;SG;F;GEN statement:SG;F in:PRPE-the:ARD;SG;DAT;N
Fernsehen] [<Goal>in den Hexenkessel^{tgt}].
television:SG;M [in:PRPE the:ARD;SG;ACC;M witchcaldron:SG;M].
'The politician gets into difficulties because of her statement on TV.'

[85] According to Ruppenhofer et al. (2010), DNI (Direct Null Instantiation) are instantiations in which the missing element is something that is already known in the linguistic or discourse context. INI (Indirect Null Instantiation) identifies missing objects of verbs which are ordinarily used transitively but are used intransitively (e.g. *Mary often drinks alone*, where the missing object of *drink* is likely an alcoholic beverage). CNI (Constructional Null Instantiation) is licensed by grammatical constructions like the omission of a subject of imperative sentences. For a complete explanation of the different types of null instantiations, see Ruppenhofer et al. (2010).

b. *[<Patient>Die Politikerin] [gerät SUPP] [<Agent>wegen
the[ARD.SG.F] politician:SG;F gets:3SG because of:PRPG
ihrer Bemerkung] [<Carrier>i-m
her:PRON;SG;F;GEN statement:SG;F in:PRPE-the:ARD;SG;DAT;N
Fernsehen] [(tgt)]. [<Goal>NI]
television:SG;M ( ).
*'The politician gets because of her statement on TV ( ).'

This FE is also syntactically and semantically obligatory and omitting it renders the sentence unacceptable even when the GOAL has already been established, as shown in (4.23b). The previous discussion provides a stepping-stone for a frame-semantic analysis of the extended senses of *geraten* in Chapter 6.

4.7 Relationship between the three central senses of *geraten*

In the previous sections, I analyzed the central senses of *geraten* as they are covered by dictionaries and discussed the third central sense of *geraten* including the frame it evokes. The third central sense of *geraten*, the unintentional change with motion towards a location sense, is the central sense to account for SVCs in terms of a metaphorical extension meaning. I argued that the third central sense of *geraten* is the central word sense and the *geraten* as SV indicates the extended senses. Several observations can be made about the third central sense. First, in all sentences the LU *geraten* is the target and frame-evoking element. Second, *geraten* is the stronger meaning component in all instances, which means that the meaning of the sentence is dependent on *geraten* evoking a specific semantic frame and not the post-verbal PP which 'only' contributes 'additional information'. In other words, the post-verbal PP specifies where the PATIENT ends up in

the case of the `Unintentional_motion` frame. The central senses of *geraten,* including the evoked frames, are summarized in Figure (4.8).

Figure (4.8) Summary of central senses of *geraten*

NP Ext [CREATED_ENTITY]	`Creating` *geraten*.V^{tgt}	(XP) [CREATOR]
NP Ext [ENTITY_1]	`Similarity` *geraten*.V^{tgt}	nach NP [ENTITY_2]
NP Ext [PATIENT]	`Unintentional_change(motion)` *geraten*.V^{tgt}	in NP [AGENT]

where XP = NP, PP, and/or AP depending on the evoked frame

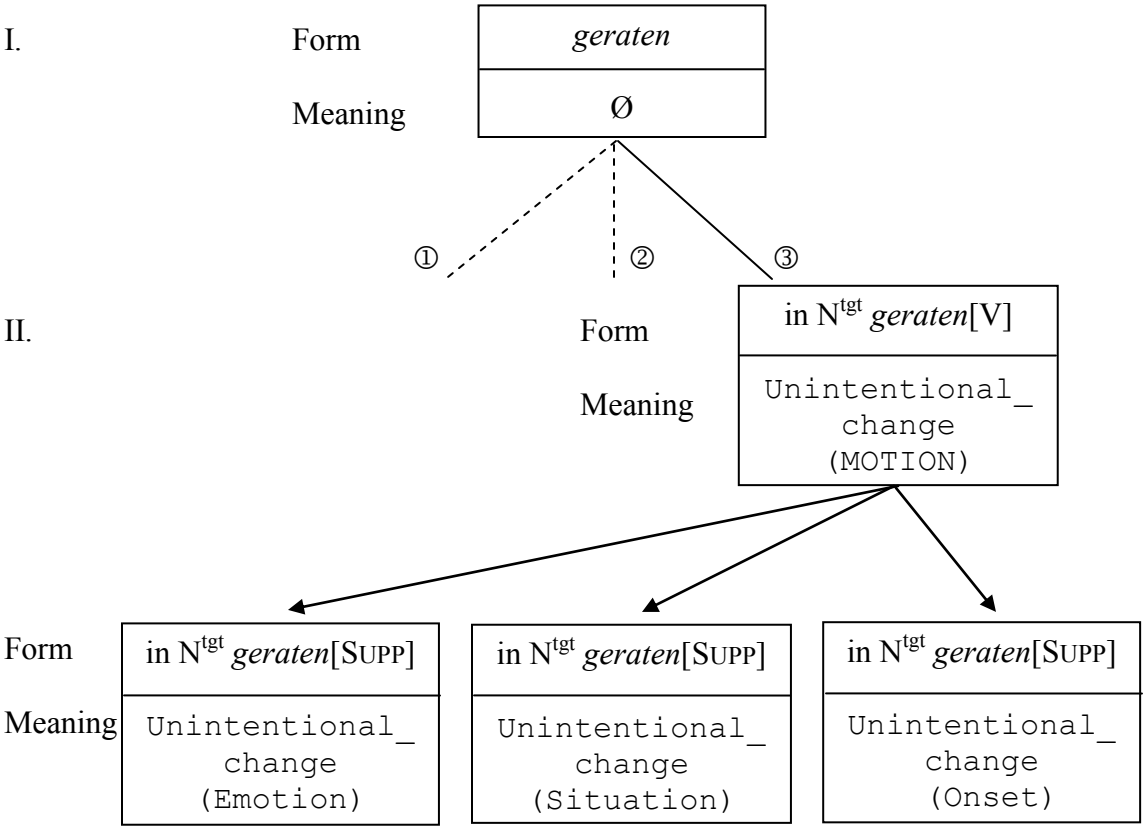
Having discussed the prototypical meanings of the verb *geraten*, I now examine the use of *geraten* as a SV. The major difference between the central senses of *geraten* and its usage as a SV is that *geraten* is the frame-evoking element in the former but not the latter. The third central sense of *geraten* indicates an unintentional change with motion towards a goal meaning, while *geraten* in SVCs indicates an unintentional change in emotion, situation, or onset.

Since SVCs with *geraten* contain both a shift of the target from *geraten* in the third central sense to the noun of the PP expressing the result and different meaning associations as indicated by the sentences in (4.23), I briefly discuss the connection between the unintentional motion meaning of the base verb *geraten* and the three

meanings of *geraten* when used as a support verb. It is important to keep in mind that the shift of frame-evoking element from full verb to the noun in support verb constructions is only due to the framework I use. Figure (4.33) indicates the relationship between the BVCs with *geraten* at the top and its SVC sub-meanings (cf. 3.4).

The meaning representation in Figure (4.9) is an adaptation of the polysemy links (I_p) as proposed by Goldberg (1995) and represents the relationship between the third central sense and *geraten* as a SV discussed in Chapter 3. Goldberg (1995) posits polysemy links between constructions if the pattern is inherited by the extension. The form of the central sense at Level II is identical to the forms of the SVCs at Level III. The difference between the levels is that each level represents a more specific instance of the level above. The arrows in Figure (4.9) indicate the metaphorical relationship between the central senses of *geraten* and *geraten* as a SV.

Figure (4.9) Schematic meaning representation of SVCs with *geraten*[86]



The top level (I) shows the most abstract construction with *geraten* from which the creation①, the resemblance②, and unintentional change③ senses are derived as discussed in detail in Section 4.3. Since SVCs with *geraten* do not include meaning parts from either the creation ① or the resemblance ② senses, these slots are left empty in Figure (4.9) and are represented by dashed arrows. The unintentional change construction with *geraten* at the second level of abstraction (II) represents a more concrete form of the abstract *in X geraten* construction. The bottom level represents the metaphorical

[86] The top two levels (I & II) are taken from Figure 4.8, with the creation and resemblance senses removed.

extensions of *geraten* as support verbs indicated by the three semantic frames evoked by the target noun.

4.8 Conclusions

In this chapter, I outlined Goldbergian Construction Grammar with a specific emphasis on her treatment of the ditransitive construction. I argued that the ditransitive construction can serve as a model for the representation of *geraten* as the central sense and the extended senses of *geraten* as SV. In this discussion, I showed that there is a form-meaning correlation and that constructions based on Goldberg are too powerful and overgenerate to include unacceptable sentences, which led me to adopt modified event-based Frame Semantics as proposed by Boas 2003 (cf. 3.2.5) in order to restrict the construction's generative powers. I addressed the meaning of the central senses of *geraten* by comparing the entries of *geraten* in three dictionaries. I argued that sense 3a of the *WDDG* is the central senses of which *geraten* as SV is an extension. I also showed how the meaning of the `Unintentional_motion` frame, evoked by the third central sense of *geraten*, is a fusion between the `Motion` and the `Unintentional_act` frames and provided a frame-semantic description of the `Unintentional_act` frame. In the last part of the chapter, I illustrated the relationship between the central senses and the extended senses of *geraten*.

Chapter 5

Geraten as a Support Verb

5.1 Introduction

In this chapter, I provide a more detailed analysis of the similarities and differences among SVCs with *geraten*. I also compare SVCs, their passive paraphrases, and their BVCs to shed light on the questions of (1) how they are related, and (2) whether they express the same types of situations.[87] This discussion will serve as a basis for my analysis of selectional restrictions in SVCs with *geraten* in the following chapter. The examples in (5.1) show passive paraphrases of SVCs with *geraten* as well as their counterpart BVCs.

(5.1)	**SVC**	**Passive**	**BVC**
a.	in Unruhe geraten in:PRPE agitation:SG;F get:INF 'to become agitated'	unruhig werden agitated:PST;PTCP get:INF 'was agitated'	unruhig sein flutter:INF 'to be agitated'
b.	in Verzug geraten in:PRPE delay:SG;M get:INF 'to get into default'	*verzugt werden[88] delayed:PST;PTCP get:INF *'was defaulted'	verzögern delay:INF 'to default'
c.	in Stimmung geraten in:PRPE mood:SG;F get:INF 'to get into the mood'	*gestimmt werden *tuned:PST;PTCP get:INF *'was tuned'	stimmen tune:INF 'to be right'

[87] Helbig & Buscha (1989) point out the systematic relationship among SVCs, passive paraphrases and BVC paraphrases. They claim that BVC paraphrases of SVCs with *geraten* are in the passive because *geraten* has an inchoative meaning.

[88] The passive indeed exists as *verzögert werden*. However, the passive does not express the same meaning as the SVC. Namely, the passive indicates that a patient is being delayed by an agent as in *Die Ankunft des Zuges wird durch den Schneesturm verzögert* ('The arrival of the train is delayed because of a snowstorm').

Even though Helbig & Buscha (1989: 87) claim that the passive functions as a paraphrase of SVCs with *geraten*, it is clear that this is not the case because only (5.1a) has an acceptable passive paraphrase, which, does not capture exactly the same meaning as the SVC. In (5.1b) and (5.1c), for example, a paraphrase using the passive does not exist since the active verb underlying the SVC is an intransitive verb. Another aspect of paraphrases of SVCs can be observed in (5.1c). The passive paraphrase is marked as unacceptable because its meaning does not correspond to the meaning of the SVC. The different meanings are expressed through a difference in form and fulfill different communicative functions. This difference in meaning and communicative function is investigated in this chapter. In Section 5.2, I discuss *geraten* when used as a SV in more detail. Section 5.3 takes a closer look at the meaning of *geraten* as a SV in general followed by a discussion of *geraten* in the sub-sense describing situations (sense 1), as emotion (sense 2), and finally as onset (sense 3). Sections 5.4 - 5.7 give a more in-depth analysis of the meanings and communicative functions of SVCs, BVCs, and passive paraphrases. Research in Construction Grammar and Frame Semantics has argued that there is a correlation between communicative function and selectional restrictions (e.g. Lambrecht 1994, Michaelis & Lambrecht 1996, or Goldberg 2000, 2004 among others). Because I am using CxG and Frame Semantics, I want to investigate if that is also the case with regard to SVCs with *geraten*. I argue that SVCs are used to present a special perspective of an event that cannot be conveyed in a similar way by either the BVC or the passive paraphrase.

5.2 German *geraten* as a SV

German verbs in their central senses are responsible for evoking a particular frame comparable to their English counterparts, as the following example with the verb *streiten* ('to fight') illustrates.

(5.2) [<Arguer1>Peter] und [<Arguer2>Paul] stritten[tgt]
Peter and Paul quarreled:3SG;PST
[<Time>gestern].
yesterday:ARI;SG;ACC;M.
'Peter and Paul quarreled yesterday.'

The base verb *streiten* ('to quarrel') in (5.2) is the target LU and evokes the `Quarreling` frame, which describes a scenario in which an ARGUER1 and an ARGUER2 express an incompatible opinion about an ISSUE.[89] ARGUER1 and ARGUER2 are people who argue with each other. If it is a group of people arguing, then the FE is called the ARGUERS. The FE ISSUE identifies the thing which the ARGUERS (or ARGUER1 and ARGUER2) argue for or about. The comparable German noun *Streit* can take *haben* ('to have') as a support verb as shown in (5.3).[90]

(5.3) [<Arguer1>Peter] und [<Arguer2>Paul] [hatten SUPP]
[Peter] and:CONJC [Paul] [had:3PL SUPP]
[<Manner>einen ganz bösen]
[a:ARI;SG;ACC;M entirely:ADV terrible:ADJ;SG;ACC;M]
[<Goal>Streit[tgt]].
[argument:SG;M].
'Peter and Paul had a really bad argument.'

[89] [http://framenet.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Quarreling&banner=]
[90] *Streit* ('argument') can also occur with *geraten* ('getting into'), *liegen* ('to lie'), and *sein* ('to be') in SVCs.

Similar to the English example in (3.6a), the frame evoked in (5.3) is the `Quarreling` frame, where Peter and Paul are having an argument (*Streit*) with each other.[91] This means that the TARGET shifts from *sehen* in (5.2) to the noun *Steit* in the SVC in (5.3). German SVCs with *geraten* thus are similar to English support verbs in that the frame-evoking target shifts lexical units, that is, from the verb to the noun, while the verb only supports the noun, thereby helping it to realize its arguments.

5.3 Meanings of SVCs with *geraten*

The meaning differences between the three sub-meanings of *geraten* when used as a support verb are illustrated in (5.4). I argue that each meaning evokes a different semantic frame and that the frames share certain aspects of meaning. Example (5.4) exemplifies the different sub-meanings in which all PATIENTS move towards an undesirable GOAL.

(5.4) a. [<Patient>Sophie] [gerät SUPP] ([<Cause>wegen ihres
Sophie gets:3SG (because of:PRPG her:PRON;SG;GEN;F
dummen Freundes]) [<Goal> in eine
stupid:ADJ;SG;GEN;M boyfriend:SG;GEN;M) in:PRPE a:ARI;ACC;SG;F
Schlägerei[tgt].
fight:SG;F.
'Sophie ends up in a fight because of her stupid boyfriend.'

b. [<Patient>Die Mutter] [gerät SUPP] ([<Cause>wegen
the[ARD.SG.F] mother:SG;F gets:3SG (because of:PRPG
des Kindes]) [<Goal>in Zorn[tgt].
the:ARD;SG;GEN;N child:SG;GEN;N) in:PRPE anger:SG;M.
'The mother gets angry because of the child.'

[91] I follow established methodologies in which frame descriptions based on English have been used successfully for the analysis of other languages, including German (Boas 2003, 2009, Burchardt et al. 2009), Spanish (Subirats 2009), and Japanese (Ohara 2009).

c. [<Patient>Das Haus] [gerät SUPP] ([<Cause>durch
the[ARD.SG.N] house:SG;N gets:3SG (through:PRPA
den Blitz]) [<Goal>in Brand[tgt]].
the:ARD;SG;ACC;M lightning:SG;M) in:PRPE fire:SG;M.
'The house catches fire because of lightning.'

The examples do not include the third central sense of *geraten* as discussed in Chapter 4, because I only focus on *geraten* as a SV. The `Hostile_encounter` frame in (5.4a) is evoked by the noun *Schlägerei* ('fight') and is used to describe situations in which opposing forces, SIDE_1 and SIDE_2 (collectively known as SIDES), fight over a disputed ISSUE and/or in order to reach a specific PURPOSE. The core FEs are the SIDES (SIDE_1 and SIDE_2), the ISSUE, and the PURPOSE. *Zorn* ('anger') in (5.4b) evokes the `Emotion_directed`[92] frame, which describes situations in which an EXPERIENCER is feeling or experiencing a particular emotional response to a STIMULUS or a TOPIC. There can also be a CIRCUMSTANCES FE under which the response occurs or a REASON why the STIMULUS evokes the particular response in the EXPERIENCER. The following six core FEs occur in this frame. The EVENT describes the occasion or happening in which the EXPERIENCER, the person or sentient entity that experiences or feels the emotion, participates in. The EXPRESSOR indicates expressions that reflect the emotional state of the EXPERIENCER and can include gestures or other expressions. The STATE expresses the experience felt by the EXPERIENCER. The emotional response is evoked by a STIMULUS, which is a person, event, or state of affairs. Finally, the TOPIC is the general area in which the emotion occurs.

[92] More precisely, the '`Unintentional_Emotion_directed`' frame.

Finally, the Destroying frame evoked by the noun *Brand* ('fire') in (5.4c) describes situations in which a DESTROYER (a conscious entity) or CAUSE (an event, or an entity involved in such an event) affects an UNDERGOER negatively so that the UNDERGOER no longer exists. The following three core FEs occur in the Destroying frame. The CAUSE is an event or entity that causes the destruction of the UNDERGOER. The UNDERGOER is the entity destroyed by the DESTROYER, and the DESTROYER performs the action that results in the destruction of the UNDERGOER.

After this brief introduction of the three senses of *geraten* when used as SVs, I now give a more in-depth discussion of these sub-meanings, which differ from the third central sense of *geraten*, in that the noun of the SVCs is the frame-evoking element and that they express an unintentional change in situation, emotion, or onset.

5.3.1 Sense 1 of *geraten* as SV ("situation")

The first sub-meaning best describes situations that occur in the Unintentional_change_in_situation frame.[93] This frame describes instances in which the EXPERIENCER ends up in an undesirable STATE, which is either caused by a STIMULUS (AGENT or CAUSE) or by the EXPERIENCER himself. The EXPERIENCER FE is the person or sentient entity that feels or experiences the emotion, while the STIMULUS identifies the person, event, or state that causes the emotional

[93] The Unintentional_change_in_situation frame is the overarching frame, which can fuse with more specific frames such as the Cause_harm frame in (5.23a), where the Cause_harm frame inherits the unintentionality aspect of the Unintentional_change_in_situation frame. In essence, the two frames fuse into the Unintentional_cause_harm frame. Note, however, that only the PATIENT is regarded as being unintentionally in the situation described by the expression.

response of the EXPERIENCER. The State is the lasting emotional response the EXPERIENCER is in as a result of the STIMULUS.[94] Consider the following examples.

(5.5) a. [<Patient>Die Expedition [geriet SUPP]
the[ARD.SG.F] expedition:SG;F got:3SG;PST
[<Place>a-m Südpol]
on:PRPE-the:ARI;SG;DAT;M South Pole:SG;M
[<Goal>in Schwierigkeiten[tgt]].
in:PRPE difficulties:PL.
'The expedition experienced difficulties at the South Pole.'

b. [<Patient>Der Komponist] [geriet SUPP] [<Manner>langsam]
the[ARD.SG.M] composer:SG;M got:3SG;PST slowly:ADV
[<Goal> in Vergessenheit[tgt]].
in:PRPE oblivion:SG;M.
'The composer fell slowly into oblivion.'

c. [<Patient>Die Wirtschaft] [gerät SUPP] [<Agent>durch
the[ARD.SG.F] economy:SG;F gets:3SG through:PRPA
die Währungskriese] [<Goal>in eine
the:ARD;SG;ACC;F currency crises:SG;F in:PRPE a:ARI;SG;ACC;F
Depression[tgt]].
depression:SG;F.
'The nation slid into an economic depression because of the currency crises.'

The examples in (5.5) illustrate the negative situation (GOAL) in which the PATIENT ends up. For example, in (5.5a) and (5.5b), the cause of why the expedition got into trouble or why the composer is slowly forgotten is not known. However, nouns in this sub-meaning are interpreted to indicate a negative end point. Sentences like the ones given in (5.6) are infelicitous because their endpoint is not negative.

[94] In order to simplify matters, I call the entities that undergo a change PATIENTS, the entities causing the change AGENT or CAUSE, and the end state GOAL. It is understood that different frames may contain differently-named frame elements. For example, while the `Emotion` frame identifies the EXPERIENCER as the entity undergoing the emotion, the `Destroying` frame uses the FE UNDERGOER to indicate the entity undergoing the destruction. These two FEs can be interpreted as instances of the more general Patient FE, according to the principles laid out by Van Valin and Wilkins (1996).

(5.6) a. *[<Patient>Paul] [gerät SUPP] [<Agent>wegen eines
* Paul gets:3SG because of:PRPG an:ARI;SG;GEN;M
Unfalls] [<Goal>in Freundschaft[tgt]].
accident:SG;GEN;M in:PRPE friendship:SG;F.
*'Paul gets into friendship because of an accident.'

b. *[<Patient>Sophie] [geriet SUPP] [<Agent> durch ihre
* Sophie gets:3SG through:PRPA her:SG;ACC;F
eigene Dummheit] [<Goal>in Liebe[tgt]].
own:ADJ:SG;ACC;F stupidity:SG;F in:PRPE love:SG;F.
*'Sophie fell in love because of her own stupidity.'

The semantic implications of *geraten* in SVCs in the `Unintentional_change_in_situation` frame are that the change must be unintentional and the result negative. The examples in (5.6) fulfill the first requirement (unintentionality), but not the second one (negative result). If the noun *Liebe* ('love') in (5.6b) is replaced with *Gefahr* ('danger'), then the sentence is acceptable, as shown in (5.7).

(5.7) [<Patient>Sophie] [geriet SUPP] [<Agent>durch ihre
Sophie got:3SG;PST through:PRPA her:SG;ACC;F
eigene Dummheit] [<Goal> in Gefahr[tgt]].
own:ADJ:SG;ACC;F stupidity:SG;F in:PRPE danger:SG;F.
'Sophie got into danger because of her own stupidity.'

This frame differs from the one evoked by the central sense of *geraten* in that frame-evoking element is the target noun of the SVC.

5.3.2 Sense 2 of *geraten* as SV ("emotion")

The second sub-meaning of *geraten* as a SV involves the unintentional change in emotion of the patient. This is captured by the `Unintentional_change_in_emotion` frame, which describes a situation in which the PATIENT involuntarily ends up in a changed emotional state that is either caused by an AGENT (intentionally or unintentionally) or by the PATIENT himself. In this frame, illustrated by the sentences in (5.8), the resulting end state of the PATIENT is a change in emotion.

(5.8) a. [<Patient>Der Student] [geriet SUPP] [<Cause>wegen
the[ARD.SG.M] student:SG;M got:3SG;PST because of:PRPG
der Resultate sein-er Forschung]
the:ARD;PL;GEN results:PL his:PRON.3SG;M;GEN-ADJEND;F research:SG;F
[<Goal>in Verwirrung[tgt]].
in:PRPE confusion:SG;F.
'The student got confused by the results of his research.'

b. [<Patient>Die Frau] [geriet SUPP] [<Cause>wegen
the[ARD.SG.F] woman:SG;F got:3SG;PST because of:PRPG
der Aussage des Mannes]
the:ARD;SG;GEN;M statement:SG;F the:ARD;SG;GEN;M man:SG;GEN;M
[<Goal>in Empörung[tgt]].
in:PRPE outrage:SG;F.
'The woman got irritated over the statement made by the man.'

c. [<Goal>Die Frau] [gerät SUPP] [<Cause>wegen
the[ARD.SG.F] woman:SG;F gets:3SG because of:PRPG
des jungen Hundes] [<Goal>in
the:ARD;SG;GEN;M young:ADJ;SG;GEN;M dog:SG;GEN;M in:PRPE
Entzücken[tgt]].
elation:SG;F.
'The woman becomes elated by the young dog.'

d. [<Patient>Das kleine Kind] [geriet SUPP]
the[ARD.SG.N] small:ADJ;SG;N child:SG;N got:3SG;PST
[<Cause>wegen der vielen Geschenke]
because of:PRPG the:ARD;SG;GEN;M many:ADJ;PL;GEN gifts:PL
[<Goal>in Freude^{tgt}].
in:PRPE happiness:SG;F.
'The small child becomes happy because of the many gifts.'

e. [<Patient>Der Student] [gerät SUPP] [<Cause>durch
the[ARD.SG.M] student:SG;M gets:3SG through:PRPA
die Fragen des Kommittees]
the:ARD;PL;ACC questions:PL the:ARD;SG;GEN;N committee:SG;GEN;N
[<Goal>in-s Grübeln^{tgt}].
in:PRPE-the:ARI;SG;ACC;N pondering:SG;N.
'The student starts to ponder because of the committee's questions.'

f. [<Patient>Der Richter] [geriet Supp] [<Cause>über
the[ARD.SG.M] jugde:SG;M got:3SG;PST over:PRPE
die Aussage der Anklage]
the:ARD;SG;ACC;M statement:SG;F the:ARD;SG;DAT;F prosecution:SG;F
[<Goal> in Erstaunen^{tgt}].
in:PRPE surprise:SG;N.
'The judge was surprised by the statements made by the prosecution.'

Unlike SVCs with situation nouns, the frame-evoking nouns such as *Grübeln* ('pondering') in (5.8e), do not have to encode a negative outcome. In fact, they can be negative, positive, or even neutral. In (5.8a) and (5.8b), the result stages are both negative. In (5.8a), the student is confused and in (5.8b), the woman is outraged by comment made. In contrast, (5.8c) and (5.8d) convey a positive result where the woman is delighted by a little dog and the young child becomes elated because of the many presents. Finally, the result nouns in (5.8e) and (5.8f) indicate a neutral result stage. The student in (5.8e) is put into a position of thinking and in (5.8f), the judge is surprised by the statement made by the prosecution. It is also possible to use *erstaunen* ('to be astonished') in either a positive (5.9a) or negative statement (5.9b).

(5.9) a. [<Patient>Die Zuschauer] [geraten SUPP] [<Cause>durch
the[ARD.PL.N] spectators:PL get:3PL through:PRPA
die einmalige Zirkusshow]
the:ARD;SG;ACC;F unique:ADJ;SG;ACC;F circusperformance:SG;F
[<Goal>in Erstaunen[tgt]].
in:PRPE amazement:SG;N.
'The spectators are amazed by the circus performance.'

b. [<Patient>Der Richter] [geriet SUPP] [<Cause>durch
the[ARD.SG.M] judge:SG;M got:3SG;PST through:PRPA
die grosse Dummheit der
the:ARD;SG;ACC;M big:ADJ;SG;ACC;F stupidity:SG;F the:ARD;PL;GEN
Jugendlichen] [<Goal>in Erstaunen[tgt]].
teenagers:PL in:PRPE surprise:SG;N.
'The judge was amazed by the tremendous stupidity exhibited by the teenagers.'

Depending on the context, *Erstaunen* can either be perceived as positive or negative. In (5.9a) the circus performance is so exquisite that the spectators are positively amazed. However, in (5.9b), the meaning of the sentence can best be described as that the judge is dumbfounded by the stupidity of the teenagers. In summary, this sub-meaning allows for nouns with either a negative or positive meaning, as well as nouns that can convey a neutral result.

5.3.3 Sense 3 of *geraten* as SV ("onset")[95]

The final frame evoked by a non-central meaning of *geraten* is that of `Unintentional_onset`. In this frame, a PATIENT is unintentionally forced to begin an event (GOAL) that is either caused by an AGENT or the PATIENT itself. Nouns denoting the result in this sub-sense of *geraten* do not indicate a change in emotion or situation as

[95] Onset is not to be understood as equivalent to onset in Optimality Theory, but rather as indicating the start of a change of state.

the previous sub-meanings did. Instead, these nouns indicate the onset of an event in SVCs.

(5.10) a. [<Patient>Die beiden Frauen] [geraten SUPP]
the[ARD.F] both:ADJ;PL women:SG;M get:3PL
[<Goal>in- s Plaudern^{tgt}].
in:PRPE-the:ARD;SG;ACC;N chit-chat:SG;N.
'Both of the women are starting to chit-chat.'

b. [<Patient>Urs und Max] [geraten SUPP] [<Cause>wegen
Urs and Max get:3PL because of:PRPG
einer Frau] [<Goal>in Streit^{tgt}].
a:ARI;SG;ACC;F woman:SG;F in:PRPE fight:SG;M.
'Urs und Max are getting into a fight because of a woman.'

c. [<Patient>Die Felswand] [geriet Supp] [<Cause>durch
the[ARD.SG.F] rock face:SG;F got:3SG;PST through:PRPA
das Erdbeben] [<Goal>in Bewegung^{tgt}].
the:ARD;SG;ACC;N earthquake:sg;n in:PRPE motion:SG;F.
'The rock face started to move because of the earthquake.'

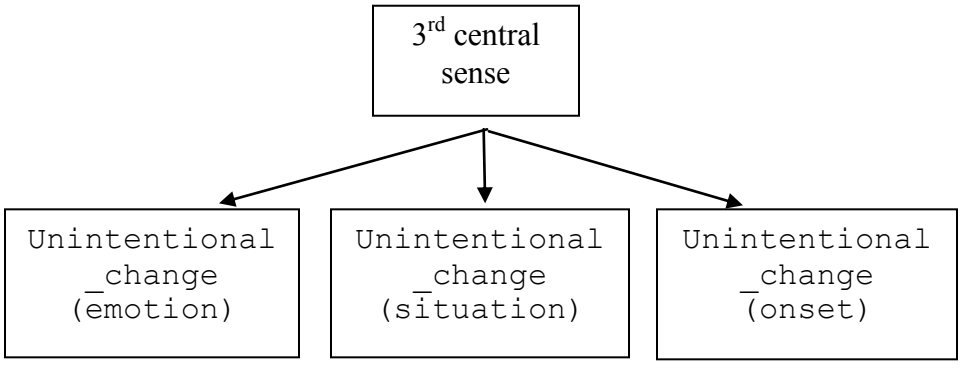
These sentences all indicate the onset stage of an event; however, nothing else is implied about the event. For example, the women in (5.10a) start to chit-chat with each other; it is assumed that there is no additional emotional change encoded that results from the change of frame. In contrast to this, Urs and Max in (5.10b)[96] are getting into a fight over a woman; here, it can be assumed that they underwent some emotional change, otherwise they would not have started to fight. However, this is necessarily the case, since it is possible to construct a context in which both fight over the woman without having any emotional investment. Finally, the rock face in (5.10c) starts to come down because of

[96] It is possible to construe (5.10a) as being a change in emotion. Since senses can overlap, it is not always possible to differentiate clearly between the senses as in (5.10b).

the earthquake. It is not possible to construct a meaningful context in which the rock face changed its emotional state and decided to crumble.

Most of the nouns used in this sub-category are neutral, but it is also possible to use negative and positive nouns without any limitations. This is not to say that there are no selectional restrictions in place, but rather that there are no limitations on negative, neutral, or positive nouns per se. The difference between this frame and the previous two is that this frame only encodes the onset of an event, while the others encode the meaningis of unintentional change of emotion and the unintentional change in situation, respectively. In addition, situation SVCs have more restrictions placed on them. For example, SVCs indicating an unintentional change in situation encode by default a negative result state and only with additional contextual information can a positive or neutral result state be interpreted. The data thus suggest that the third meaning of *geraten* as an SV only encodes the onset of an event. The following diagram represents how the frames discussed above are related.

Figure (5.1) The 3rd central sense and its metaphorical extensions



In this section, I only addressed the various meaning aspects of SVCs with *geraten*. I address the obvious form differences in Chapter 6. The following discussion of the communicative functions of SVCs sets the stage for a comparison of the meanings and communicative functions of SVCs, BVCs, and passive paraphrases.

5.4 Preliminaries about communicative functions of SVCs with *geraten*

Communicative function refers to the fact that utterances serve a specific linguistic purpose; that is, utterances are used to convey information in order to point out a special perspective of an event.[97] In the following section I provide a brief overview of different conceptualization processes from a cognitive linguistics point of view as described by Croft & Cruse (2004). Conceptualization processes (or construal operations) refer to the ability of humans to use alternative expressions in order to describe the same event, i.e. *Timmy is in front of the tree* vs. *Timmy is behind the tree* (Croft & Cruse 2004: 41). These conceptualizations convey different relationships between the speaker and what the speaker is referring to (e.g. *mother*, *tree*, *car* etc.) and also of the situation being described. The construal operations are listed in Table (5.1). I only focus on those that appear to be most relevant to the discussion of the communicative functions of SVCs, BVCs, and the passive, with the understanding that the range of conceptualization processes used in human language is far greater than outlined here.[98]

[97] For more information about communicative function, see Lakoff (1987) and Talmy (1996, 2000), among others.
[98] Many construal operations have been identified; but the two most comprehensive classifications are those of Talmy (1977, 1978, 1988) and Langacker (1987a).

Table (5.1) Linguistic construal operations as instances of general cognitive processes (adapted from Croft & Cruse (2004: 46)

I.	Attention/Salience
	A. Selection
	1. Profiling
II.	Judgment/Comparison
	A. Categorization (framing)
III.	Perspective/Situatedness
	A. Viewpoint
	1. Vantage point
	2. Orientation
IV.	Constitution/Gestalt
	A. Force Dynamics

The first construal operation is "selection," which refers to the ability to focus on those aspects of our experience that are most relevant and ignore those aspects that are irrelevant. Profiling is one way of selection, i.e. different words focus the attention onto different frame participants (see the discussion of the `Commercial_transaction` frame in section 5.2.1). Derivational morphology is also able to shift the profile; Cruse & Croft (2004) point out that the English suffix *-er* shifts the profile from process to agent as in *bake* - *baker*. The second construal operation is categorization, which is part of judging comparisons and as such is used to compare the experience in question with prior experiences in order to judge them similar or different. Langacker (1987) terms the comparison of the current situation with the category it was assigned to 'sanctioning'. He differentiates between full sanction and partial sanction. Full sanction occurs when there

is no problem in subsuming the current situation within the category it was assigned to, while partial sanction indicates an extension of the category to the current situation. Partial sanction occurs in the following example, given by Croft & Cruse (2004: 55), when the pilot informs the passengers that they were put on a "path they call a racetrack; that's essentially a circle with two straight sides," where 'racetrack' refers to the holding pattern, and passengers must significantly reconceptualize their 'idea' of a circle.[99] The third cognitive process is perspective/situatedness, which focuses on viewpoint, more specifically vantage and orientation. A vantage point describes the respective position of the person/object in question. For example, the sentence *The car is behind/in front of the house* refers to the situational vantage point of the speaker. Langacker (1987) argues that a particular vantage point imposes a foreground-background alignment on a scene. The vantage point exists not only from the speaker's point of view, but can also apply to the addressee as in *You will find the box behind the tallest tree at midnight*, where 'behind' is interpreted from the addressee's vantage point at a given time. While vantage point implies a horizontal dimension, orientation refers to the vertical orientation[100] as in the sentence *The cave is below you*. The final cognitive construal discussed here is the force dynamic model as conceptualized by Talmy (1979, 1988, 2000). It proposes a generalization of the notion of causation, i.e. different kinds of forces act upon the participants of an event in different ways. In (5.11), for example, Richie (a causer) forces the ball (causee) to move.

[99] In cases where people are familiar with horse racing or NASCAR tracks, the mention of racetrack may not trigger reconceptualization, since these tracks are designed as an elongated circle.
[100] It is assumed that horizontal and vertical are defined by the upright position of a person (Croft & Cruse 2004).

(5.11) Richie kicked the ball. (Croft & Cruse 2004: 66)

Different verbs or voice forms also change the force-dynamic structure of events. For example, in (5.12a), the force-dynamic value is neutral while in (5.12b), the bowl is construed as resisting some force that is applied to it.

(5.12) a. The bowl was on the table.
b. The bowl stayed on the table. (Croft & Cruse 2004: 66)

This brief summary shows that there are a great number of construals that influence the experience to be communicated. That is, "the choice of words and their part of speech to the various inflections and constructions that make up the grammatical structure of an utterance involves conceptualization" (Croft & Cruse 2004: 69). The following example illustrates construal in resultatives and provides an example of how resultative constructions can influence the communicative function. Consider the example below, adapted from Boas (2003: 146).

(5.13) a. Judith painted the room.
b. Judith painted the room red.

Example (5.13a) conveys information about a painting event in which two event participants are involved - *Judith* and *the room*. Note that the perspective on the event is general, because we only now that *the room* is affected in some way by *Judith's* activity.

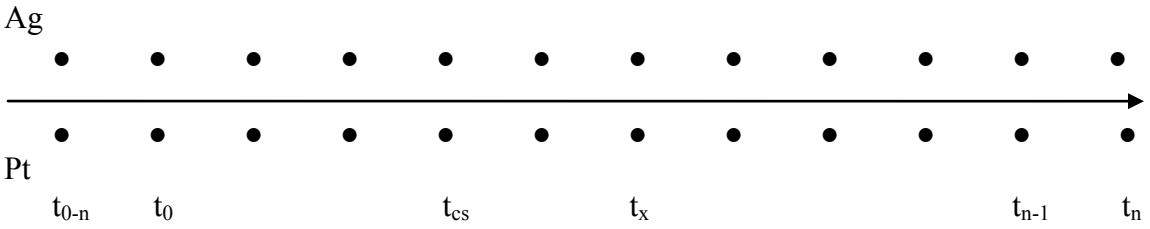
We know that the room is affected because the central sense of *paint* implies that an agent applies some kind of liquid onto a surface. In the case of (5.13a), it is possible to conclude that the room is affected by Judith's painting; however, no inference can be made about the exact outcome of the activity, such as what color the room was painted. In (5.13b), the resultative phrase *red* provides a more specific viewpoint of the painting event by giving more information about the outcome of the painting activity. The difference between these two sentences is that (5.13b) highlights the specific outcome of the painting activity while (5.13a) does not. That is, the resultative phrase *red* in (5.13b) highlights the exact outcome of the painting event, thereby conveying a more specific viewpoint of the event denoted by the verb *paint*.

In the next section, I discuss communicative function of SVCs with *geraten* in order to distinguish them from their BVC and passive paraphrases. More precisely, I show that even though the communicative functions of SVCs with *geraten* are different, they nevertheless form distinct categories which are semantically related to each other. From my previous discussion regarding the third central meaning of *geraten* and its usage as a SV in Chapter 3, four distinct senses can be identified based on the data in the *WDDG* (cf. Section 5.3): (1) the locative sense, (2) the situational sense, (3) the emotional sense, and (4) the onset sense. Remember that Helbig & Buscha (1989) claim that passive paraphrases convey similar meanings as SVCs with *geraten*. If this is the case, then both SVCs and their passive paraphrases should have the same perspective on the event.

To show the differences in the profiled and backgrounded participants[101] in SVCs, BVCs, and passive construction and the perspective given on the event by the different types of constructions, I propose the timeline in Figure (5.2). It illustrates the basic progression of an event over a period of time involving an agent (Ag)[102] and a patient (Pt) as they move along the time line they cross several time "indices." The following time indices are listed: the first index (on the far left) is labeled $\mathbf{t_{0\text{-}n}}$ and indicates a point before the event described by the verb took place. The interval labeled $\mathbf{t_0}$ is the originating interval. This interval indicates the beginning of the event described by the different constructions (BVCs, passive, or SVCs). The next time index I use is termed $\mathbf{t_{cs}}$. This index is used to show the point where the patient changes from one state to another state (which becomes important in the communicative function account of SVCs); that is, it points to when "**T**ime of **c**hange of **s**tate" occurs. $\mathbf{t_x}$ simply indicates a time interval between $t_{0\text{-}n}$ and t_n. One interval to the right is $\mathbf{t_{n\text{-}1}}$. This index indicates the time right before now (**tn**), that is, **T**ime **n**ow**–1**. The final index (on the far right) is labeled $\mathbf{t_n}$ and stands for "**T**ime **n**ow," indicating the present point in time. Finally, the dots (●) above and below the time line depict random time intervals as the agent and patient progress along the time line.

[101] See Chapter 5.2.1 for a discussion of profiling and background.
[102] In this chapter, I use Agent (Ag) to mean cause or causing event.

Figure (5.2) Timeline



The following sentences are used to illustrate the different communicative functions of BVCs (5.14a), SVCs (5.14b), and the passive (5.14c) paraphrases.

(5.14) a. [<Stimulus>Die Katze] ängstigt[tgt]
the[ARD.SG.F] cat:SG;F frightens:3SG
[<Experiencer>die Maus].
the:ARD;SG;ACC;F mouse:SG;F]
'The cat scares the mouse.'

b. [<Experiencer>Die Maus] [gerät SUPP] [<Stimulus>durch
the[ARD.SG.F] mouse:SG;F gets:3SG [through:PRPA
die Katze] [<State>in Angst[tgt].
the:ARD;SG;ACC;M cat:SG;F] in:prpe fear:SG;F.
'The mouse becomes scared [because of the cat].'

c. [<Experiencer>Die Maus] wurde [<Stimulus>durch
the[ARD.SG.F] mouse:SG;F was:3SG;PST [through:PRPA
die Katze] verängstigt[tgt].
the:ARD;SG;ACC;M cat:SG;F] feared:PST;PTCP.
'The mouse was scared [by the cat].'

In (5.14a), the `Experiencer_obj` frame is evoked by the verb *ängstigen* ('to frighten'). This frame represents a scenario in which a phenomenon or STIMULUS provokes an emotion in the EXPERIENCER. In the scenario represented above, the verb profiles the cat and the mouse and provides a perspective on the present state of the

mouse. The frame evoked by the noun *Angst* in (5.14b) is the `Fear` frame,[103] which describes a scenario in which the EXPERIENCER, EXPRESSOR, or STATE is having an emotion or fear about a TOPIC or as evoked by a STIMULUS. However, when *Angst* is used in an SVC, it is the `Experiencer_obj` frame that is evoked because that the `Fear` frame expresses a situation in which the EXPERIENCER is **having** an emotion, but in the `Experiencer_obj` frame, the EXPERIENCER is **provoked** into having an emotion. Comparing (5.14a) with (5.14b), there is also a change in the profiled frame elements. While the cat and the mouse are profiled in (5.14a), the mouse and the fear are profiled in (5.14b). The perspective of the event as expressed by (5.14b) differs from (5.14a) in that the focus is on the mouse and the emotional reaction of the mouse. Finally, in (5.14c), the `Experiencer_obj` frame is evoked by *verängstigt*. In this instance, only the mouse is profiled, providing yet another perspective on the same event.

The next sections provide a detailed description of the meaning and communicative functions of BVCs, SVCs and passive paraphrases. I use the timeline in Figure (5.2) to illustrate the differences among these three sentence types. I am interested in whether communicative functions influence selectional restrictions in event-frames of target nouns in SVCs with *geraten*.

[103] A more precise name would be `Unintentional_fear` frame.

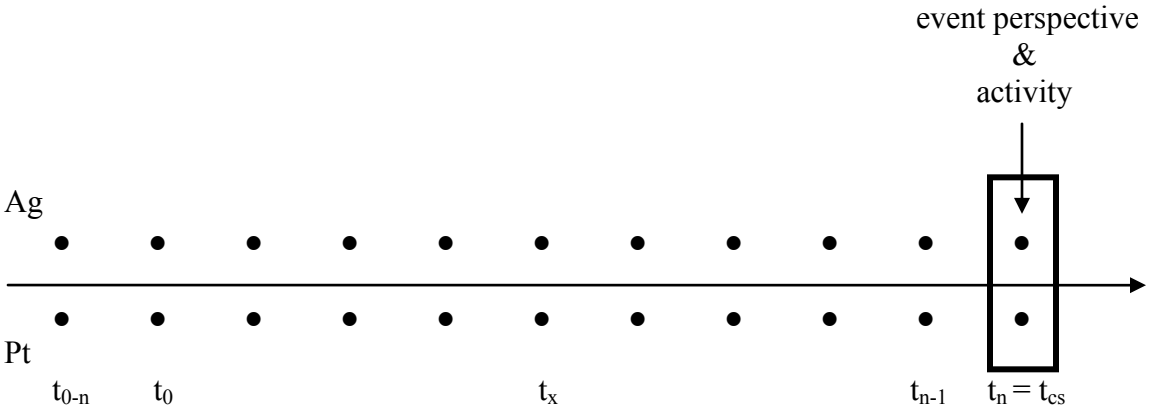
5.5 Meaning and communicative functions of BVC paraphrases

(5.15) [<Stimulus>Die Katze] ängstigt[tgt] [<Experiencer>die Maus].
the[ARD.SG.F] cat:SG;F frightens:3SG the:ARD;SG;ACC;F mouse:SG;F]
'The cat scares the mouse.'

Comparing the BVC in (5.15) with the passive paraphrase (5.14c), it is clear that the two sentences express a similar situation, namely that the mouse is scared by the cat and the cat is the foregrounded participant, while the mouse is the backgrounded one.

However, the BVC in (5.15) offers a specific event perspective which is that the event takes place at this precise moment. Figure (5.3) is a graphic representation of the event perspective of (5.15). The box at t_n indicates that the perspective is focused on both the cat and the mouse and that at this precise moment (t_n), the mouse is scared by the cat because the BVC focuses the perspective of the event on the present. Therefore, the event of becoming scared and the timespan in which the scaring activity occurs are identical. The BVC focuses the hearer's attention on the outcome of the event.

Figure (5.3) Event perspective of BVC



The next two sections take a more in-depth look at the meaning and the communicative function of SVCs with *geraten* and the passive paraphrase, respectively.

5.6 Communicative function of SVCs with *geraten*

The information conveyed by the SVC in (5.14b) is that the mouse went from not being scared to being scared because of the appearance of the cat. In addition, the SVC is interpreted as the patient unintentionally changing state (i.e. emotion, situation, or beginning). The highlighted period, the period onto which the hearer's attention is drawn, starts with the agent (Ag) and patient (Pt) in a state prior to what is expressed by the SVC, and then the agent does something that is indicated by the SVC, which changes the state of the patient. The agent is only part of the event from t_0 - t_{cs}. At $t_{0\text{-}n}$, the patient is at the beginning of the event and nothing (yet) has influence on the state of the patient. Between t_0 and t_{cs}, the patient gradually goes from this initial state to the changed state, and after t_{cs}, the patient is in the changed state.

Figure (5.4) Event perspective of SVC with *geraten*

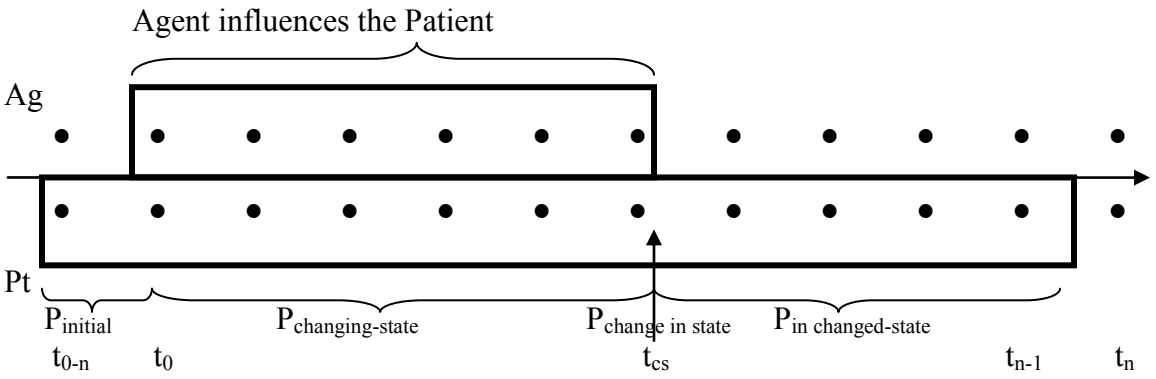


Figure (5.4) illustrates the perspective of the event expressed by the SVC in (5.14b) above and is an abstract representation of this event. At $t_{0\text{-}n}$ or $\mathbf{P_{initial}}$ (Point initial), the mouse is not aware that a cat is near, but at t_0, the cat appears and over time the mouse becomes scared, which leads to point t_{cs}. From t_0 to t_{cs}, the mouse is changing its emotional state, which is indicated as $\mathbf{P_{changing\text{-}state}}$. At t_{cs}, the point where the change of state is completed ($\mathbf{P_{change\ in\ state}}$), the mouse is finally scared. Comparing the boxes of the two event participants, it is clear that the SVC in (5.14b) focuses on the patient from point $t_{0\text{-}n}$ to $t_{n\text{-}1}$, while the agent is in focus during the period from t_0 to t_{cs}. Since Figure (5.4) is an abstraction of sentence (5.14a), it is also possible to compress the entire scenario to three or fewer time interval points (●). This means that the P points in Figure (5.4) can happen instantaneously.

The perspective of the event described by SVCs with *geraten* is twofold. The part of the event that is highlighted is different for the agent and patient. As illustrated above, the 'agentive window' only focuses on the time frame t_0 to t_{cs}, i.e. the SVC only

perspectivizes the agent during the time interval in which the agent is involved when the patient changes state from not being scared to being scared. Since SVCs with *geraten*, similar to passive constructions, focus on the patient of the active sentence, the mouse is perspectivized throughout the event, while the agent is understood as being involved in causing the change in state of the patient only.[104]

In the last two sections, I contrasted the differences in meaning and communicative function between BVCs and SVCs. I showed that these two constructions have different functions because they focus on different perspectives of an event. While the BVC provides an 'instantaneous' picture of the event, the SVC provides a much longer focused event-frame. That is, the SVC focuses on the entire period in which the mouse changes states, including the period before such a change occurs and not only on the final state of the mouse.

5.7 Meaning and communicative functions of passive paraphrases

Having discussed the meaning and the communicative function of SVCs with *geraten*, I now explain the passive paraphrase of SVCs with *geraten* and their meaning and communicative function. Consider (5.14c), reproduced here as (5.16), which illustrates the passive paraphrase of the SVC in (5.14b).

[104] The scenario illustrated in Figure (5.4) can potentially happen instantaneously. Three types of SVCs can illustrate different changes of state: 1) these SVCs indicate a gradual change of state: *ins Elend geraten* ('became miserable'), *in Unordnung geraten* ('became disordered'), *in Verwirrung geraten* ('become confused') and *in Verzweiflung geraten* ('get into despair'); 2) they indicate an instantaneous change of state: *in Bewegung geraten* ('get into motion'), *ins Schwanken geraten* ('get into a swinging motion '), *ins Schleudern geraten* ('starting to skid') and *ins Wanken geraten* ('get into a swaying motion'); and 3) they allow for either a gradual or instantaneous reading of the change of state: *in Armut geraten* ('became impoverished'), *in Schulden geraten* ('get into debt'), *in Verdacht geraten* ('to come under suspicion') and *in Isolierung geraten* ('became isolated').

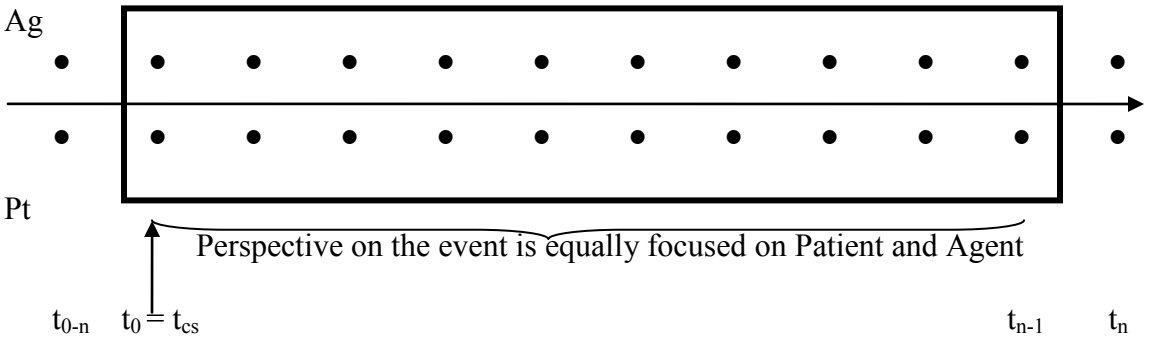
(5.16) [<Experiencer>Die Maus] wurde [<Stimulus>durch die Katze] verängstigt[tgt].[105]
the[ARD.SG.F] mouse:SG;F was:3SG;PST [through:PRPA the:ARD;SG;ACC;M cat:SG;F] feared:PST;PTCP.
'The mouse was scared [by the cat].'

The passive paraphrase shifts the focus from the agent (cat) to the patient (mouse). While the cat still scares the mouse, it is the mouse that is denoted by the `Experiencer_def` frame and not the cat because the entire focus is given to the mouse. In addition, the grammatical subject, the cat, becomes a secondary player and is optional as is indicated by square brackets above around the PP *durch die Katze* ('by the cat').

The event perspective of the passive paraphrase highlights the period from when the cat started to scare the mouse up to the period right before now (t_n), i.e. the time period between t_0 and t_{n-1}. The communicative function of the passive conveys that the cat keeps scaring the mouse during the perspectivized time interval. That is, the patient undergoes the change of state during the same time interval the agent acts on the patient. Even though the perspective of the event in the passive highlights the patient, the agent continues to scare the patient throughout the event perspective denoted by the passive sentence. This means that the agent consistently acts upon the patient throughout the event.

[105] The German prefix *ver-* has its own specific meaning of; negative result (e.g. *verhören* ('to misunderstand'/'to interrogate')), removal (e.g. *verjagen* ('to chase away')), or termination of a temporal event (e.g. *verblühen* ('to wilt')) (cf. Wunderlich (1986), Olson (1989 & 1990), Vater (1994), Wiese (2000), among others). [Examples taken from: http://www.dagmarwilde.de].

Figure (5.5): Event perspective of passive paraphrase



When comparing SVCs with passive paraphrases, (at least) three differences become apparent even though in both types the perspectivized event ends at t_{n-1}. First, in (5.14b), the agent is only understood as being involved in causing the change of state of the patient, but not sustaining it as compared to the passive construction. Second, SVCs perspectivize the agent at most from t_0 to t_{cs}, while the passive construction perspectivizes the agent and the patient for the entire duration of the event. Third, SVCs include the initial time prior to t_0, which is not included in the passive sentence.

5.8 Conclusions

In this chapter, I argued that meaning differences and differences in communicative function exist among the central meaning of *geraten*, SVCs with *geraten*, and their passive paraphrases. More precisely, I showed that each of the three constructions (SVC, passive, and BVC) offer a different focus and perspective on/of an event. For example, the difference between SVCs and their passive paraphrases is that the

passive does not include the preparatory stage leading up to the event. I showed that SVCs with *geraten* can be categorized into one of three metaphorical senses: (1) situation, (2) emotion, and (3) onset. I argued that it is possible to describe each sub-meaning in terms of characteristics specific to each meaning. In the last part of the chapter, I described the difference in meaning and communicative function of SVCs with *geraten*, the passive paraphrase, and the BVC paraphrase. My discussion showed that each construction has slight differences in meaning and communicative function that cannot be expressed by the others, because each of the investigated constructions serve a specific linguistic purpose. Even though paraphrases exist for some of the SVCs with *geraten*, they fail to capture all of the meaning encoded by the particular SVC. The difference in communicative function among SVCs, BVCs, and passive paraphrases is due to the period highlighted by the support verb, but does not influence selectional restrictions of the nouns in SVCs. The noun in SVCs is the driving force behind the categorization into emotion, situation, or onset, as I show in the next chapter. Because there is no correlation between selectional restrictions and communicative functions, the selectional restrictions must be captured in the lexicon. In the following chapter, I examine the structure of SVCs with *geraten.*

Chapter 6

Selectional Restrictions in SVCs with *geraten*

6.1 Introduction

In this chapter, I focus on each of the sub-meanings of *geraten* as a support verb and explore the selectional restrictions that apply to nouns in those SVCs. Consider the following examples, taken from COSMAS II.

(6.1) a. Damit nicht genug, gerät er auch
with it[ADV] not:NEG enough:ADV, gets:3SG he:PRON;SG;NOM;M also:ADV
noch in eine Schlägerei[tgt], die
even:ADV in:PRPE a:ARI;SG;ACC;F fight:SG;F, the:REL;PRON;SG;NOM;F
nicht ohne Folgen bleiben soll.
not:NEG without:PRPA consequences:PL remain:INF should:3SG.
'As if that is not enough, he also gets into a fight, which will have consequences for him.' [A98/NOV.71677]

b. Der Student gerät in-s
the[ARD.SG.M] student:SG;M gets:3SG in:PRPE-the:ARD;SG;ACC;N
Grübeln[tgt].
pondering:SG;N.
'The student starts to ponder.'

c. In Sargans ist a-m Donnerstagabend
in[PRPE] Sargans is:3SG on:PRPE-the:ARD;SG;DAT;M Thursdayevening:SG;M
ein Holzschopf in Brand[tgt] geraten.
a:ARI;SG;M woodshed:SG;M in:PRPE fire:SG;N got:INF.
'On Thursday evening a woodshed caught fire in Sargans.'
[A10/JAN.01766]

It is not possible to replace *Grübeln* in (6.1b) with the near-synonym *Gedanken* ('thoughts'), e.g. *#Der Student gerät in Gedanken* ('the student starts to think').[106] In

[106] Even though the sentence is felicitous, it is different in meaning. I go into more detail about the substitution of *Grübeln* in Section 6.5.

order to account for novel instances of SVCs with *geraten*, it is necessary to know the constraints that restrict certain (near-) synonyms from acting as substitutes in these constructions.

This chapter is structured as follows: Section 6.2, I provide information regarding the result NP^{TARGET} (henceforth NP^{tgt}) slot of SVCs. The NP^{tgt} is the frame-evoking noun in the SVC and is labeled ^{tgt} (target) in accordance with FrameNet practice. The goal of this section is to illustrate selectional restrictions imposed by the NP^{tgt} slot in SVCs. Section 6.3 discusses the meaning of SVCs with *geraten* expressing an unintentional change in emotion in more detail with focus on the restrictions of emotion nouns, and in Section 6.4, I illustrate how SVCs with *geraten* encoding an unintentional change in emotion relate to the central senses of *geraten*. In Section 6.5, I propose a productivity continuum that indicates the ability of nouns in SVCs to be replaced by nouns with similar meanings. Finally, in Section 6.6, I provide a brief analysis of SVCs encoding an unintentional change in situation and onset.

6.2 Preliminaries

Before I begin my analysis of the first sense of *geraten* as a SV, I briefly discuss the status of the result target NP. In Chapter 3.4, I argued that the post-verbal PP expresses the FE GOAL. Since the form of the GOAL FE is similar for all three support verb meanings of *geraten*, it can be represented as in Figure (6.1). In essence, the PP^{tgt} reflects that the frame-evoking element now resides in the PP headed by *in* (henceforth [in NP^{tgt}]). It is necessary to specify each member in the PP^{tgt} in order to assign what

meaning is contributed by each of its members. Figure (6.1) 'deconstructs' the PP^{tgt} into its member parts while Figure (6.2) shows the PP^{tgt} as a tree-diagram. I use the notation in Figure (6.1) for the remainder of this dissertation.

Figure (6.1) Detailed representation of PP^{TARGET}

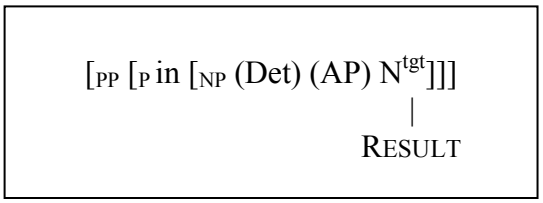
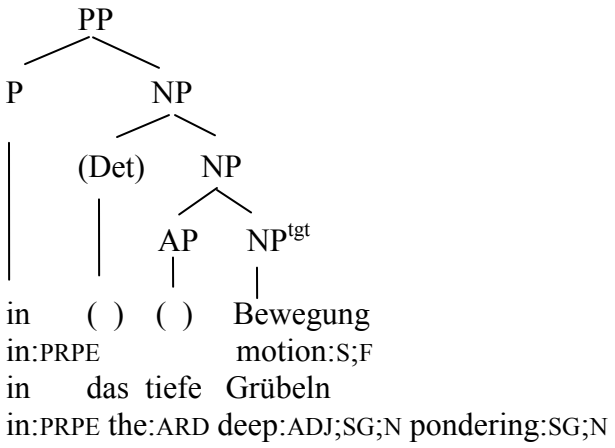


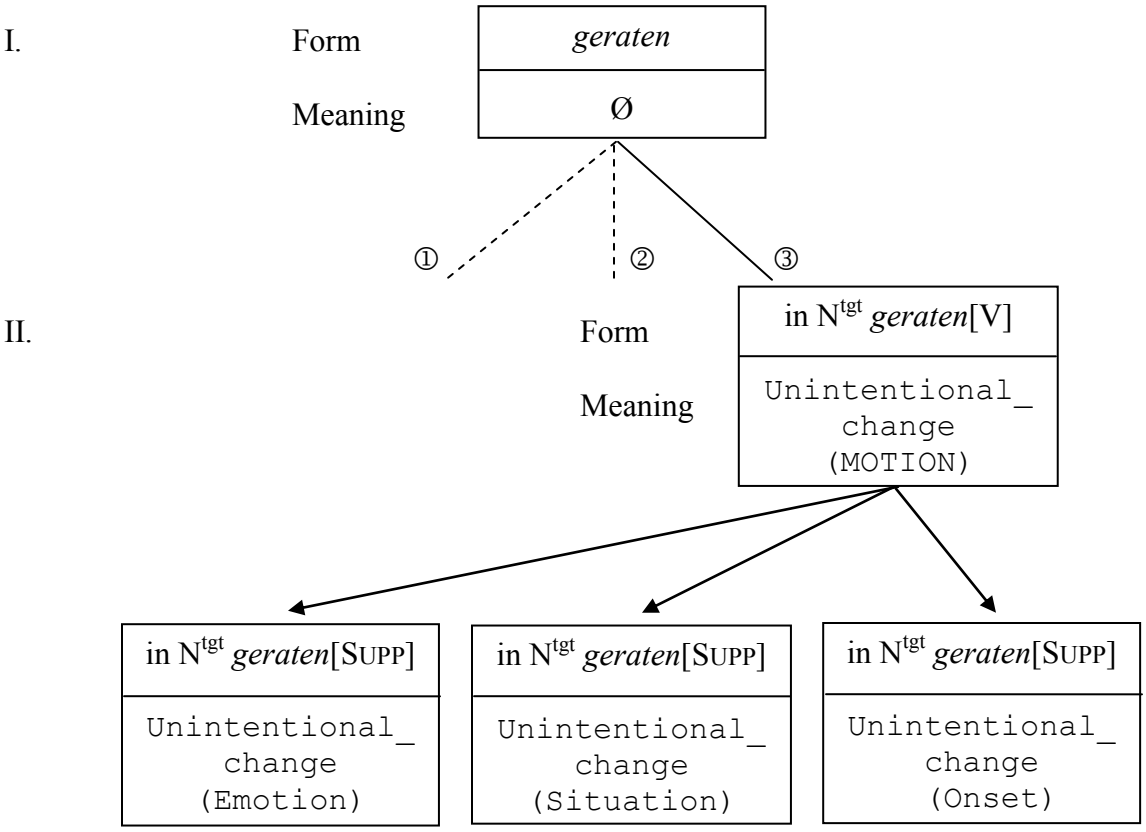
Figure (6.2) Tree-diagram of PP^{TARGET}



Since SVCs with *geraten* shift the frame-evoking TARGET from *geraten* in the central sense to the noun of the PP expressing the result, I briefly discuss the connection between the unintentional change with motion meaning of the base verb *geraten* and the three meanings of *geraten* as a support verb. Figure (4.9), reproduced here for convenience as

Figure (6.3), indicates the relationship between BVCs with *geraten* and its SVC sub-meanings.[107]

Figure (6.3) Schematic meaning representation of SVCs with *geraten*.



The meaning representation in Figure (6.3) is an adaptation of Goldberg's (1995) analysis of the polysemy network of the ditransitive construction, discussed in detail in Chapter 4.3 with respect to SVCs with *geraten*, and represents the relationship between the third central sense and *geraten* as SV, discussed in Chapter 3.3. The arrows indicate a

[107] As a reminder to the reader, the SVC sub-meanings are metaphorical extensions of the base verb *geraten*.

metaphorical meaning extension and no new construction is posited, since I argue only for a meaning change due to metaphorical extensions.[108]

The form of the central sense at Level II is identical to the forms of the SVCs on Level III. The difference between the levels is that each level becomes a more specific instance of the level above. For example, at Level II *geraten* is the frame-evoking LU and indicates an unintentional change encoding motion towards a location, while at Level III *geraten* acts as a SV and the noun is the frame-evoking LU.

The top level (I) shows the most abstract instantiation of *geraten*, with no concrete meaning. It is intended to show that the creation (①), the resemblance (②), and unintentional change with motion meaning (③) senses all share the same morphological form. The unintentional change construction with *geraten* at the second level of abstraction (II) represents a more concrete form of the abstract *geraten* construction. The bottom level (III) represents the metaphorical extensions of *geraten* as a support verb and the three general semantic frames evoked by target nouns.[109]

6.3 Selectional restrictions on SVCs with *geraten*

In the next sections, I focus in more detail on the selectional restrictions of SVCs with *geraten* to find out how specific such restrictions must be in the event-frame. The following examples illustrate that noun substitution is not always possible.

[108] Goldberg (1995: 75) posits polysemy links "to capture the semantic relations between a particular sense of a construction and any extensions from this sense," i.e. the syntactic pattern is inherited from the central sense by the extensions, which eliminates the need to state the syntactic pattern for each extension (cf. 4.2).
[109] The patterns of the third central sense of *geraten* ('unintentional_change') and SVCs with *geraten* are identical [[NP] [V/SV] [PP] [in NP]].

(6.2) a. Max und Moritz geraten in eine
max and moritz get:3PL in:PRPE a:ARI;SG;ACC;F
Streiterei/Auseinanderstzung.
argument:SG;F/argument:SG;F.
'Max and Moritz get into an argument/argument.'

b. Susi gerät in Ekstase/Verzückung.
susi gets:3SG in:PRPE ecstasy:SG;F/ecstasy:SG;F.
'Susi becomes ecstatic.'

c. #Das Haus geriet in Brand/*Feuer
the[ARD.SG.N] house:SG;N got:3SG;PST in:PRPE fire:SG;M/fire:SG;N.
'The house caught fire.'

In (6.2a) and (6.2b), the NPs^{tgt} can replace each other in the SVC with minimal loss of meaning equivalence, while in (6.2c), the NP^{tgt} *Feuer* ('fire') cannot replace *Brand* ('fire').[110]

The following three case studies provide an illustration that nouns adhere to specific requirements with are captured and imposed on by the event-frame of the 'original' NP^{tgt}. The case studies look at nouns discussed in more detail in this chapter.

Case Study No. 1:

The first case study contrasts *Feuer* ('fire') and *Brand* ('fire'), which are listed as synonyms in dictionaries like the *Langenscheidt* or the *Duden,* and thus are considered interchangeable, as the following examples indicate.[111] This case study attempts to shed

[110] I discuss this example in more detail in Section 6.6.2.2.
[111] Duden definitions for *Feuer* and *Brand*: a) *Feuer*: Form der Verbrennung mit Flammenbildung, bei der Licht und Wärme entstehen (form of flame emitting combustion, during which light and heat is produced). b) *Brand*: großes, vernichtendes Feuer, Feuersbrunst, Schadenfeuer (big, annihilating fire, blaze, destructive fire).

light on why it is not possible to replace *Feuer* and *Brand* when used independently (not in SVCs) and as part of SVCs with *geraten*.[112]

Feuer ('Fire')

(6.3) a. Dank dieses Wasserbezuges gelang
thanks to[PRPG] this:ADJ;GEN waterdelivery:M;SG;GEN succeded:3SG;PST
es der Feuerwehr, das **Feuer**
it:PRON:3SG the:ARD;N firedepartment:N;SG, the:ARD;N fire:N;SG
unter Kontrolle zu bringen und die
under:PRPE control:F;SG to bring:INF and:CONJC the:ARD;PL
einzelnen Mottbrände zu löschen.
individual:ADJ;PL swellfires:PL to extinguish:INF.
'Because of this water delivery, the fire department was able to bring the fire under control and to extinguish the remaining smoldering fires.'

b. …der Feuerwehr, den Brand unter
…the[ARD.N] firedepartment:N;SG, the:ARD;N fire:N;SG under:PRPE
Kontrolle…
control:F;SG…
'…, the fire department was able to bring the fire under control...'

(6.4) a. Die Stützpunktfeuerwehr Münchwilen konnte dann
the[ARD.F] basefiredepartment:F;SG Münchwilen could:3sg then:ADV
das **Feuer** a-m Fahrzeug endgültig
the:ARD;ACC fire:M;SG on:PRPE-the:ARD;DAT vehicle:N;SG finally:adv
löschen.
extinguish:INF.
'The fire department stationed in Münchwilen was able to finally extinguish the vehicle fire.'

b. …konnte dann den Brand a-m
…could[3sg] then:ADV the:ARD;ACC fire:M;SG on:PRPE-the:ARD;DAT
Fahrzeug…
vehicle:N;SG…
'…was able to finally extinguish the vehicle fire.'

[112] In the (b) sentences I only reproduce a partial sentence to show that *Feuer* and *Brand* are interchangeable when used outside of SVCs. The rest of the sentence is identical to the (a) sentence.

(6.5) a. Offenbar brach das **Feuer** in der
apparently[ADV] broke:3SG;PST the:ARD;N fire:M;SG in:PRPE the:ARD;DAT
Küche aus.
kitchen:F;SG out:SPFX.
'Apparently, the fire started in the kitchen.'

b. …brach der Brand in der…
…broke[3SG.PST] the:ARD;N fire:M;SG in:PRPE the:ARD;DAT…
'…, the fire started in the…'

(6.6) a. Wie die Polizei berichtet, wurde das
how[ADV] the:ARD;F police:F reports:3SG, was:3SG;PST the:ARD;N;SG
Feuer a-m Morgen des
fire:N;SG on:PRPE-the:ARD;DAT morning:M;SG the:ARD;GEN
Silvestertages um 9.47 Uhr gemeldet.
newyearseveday:M;SG;GEN at:PRPA 9.47 o'clock notified:PST;PTCP.
'As the police reports, the fire was called in at 9.47 in the morning on New Year's Day.'

b. …berichtet, wurde der Brand a-m
…reports[3SG], was:3SG;PST the:ARD;N;SG fire:N;SG on:PRPE-the:ARD;DAT
Morgen…
morning:M;SG…
'...reports, the fire was called in […] in the morning…'

(6.7) a. Das **Feuer** griff auch auf einen
the[ARD.N.SG] fire:N;SG grabbed:3SG;PST also:ADV on:PRPE a:ARI:M;ACC
Lastwagen über.
truck:M;SG over:SPFX.
'The fire also set the truck on fire.'

b. Der Brand griff…
the[ARD.N.SG] fire:N;SG grabbed:3SG;PST…
'The fire also set....'

Brand (‘Fire’)

(6.8) a. Sie hatte dem Eigentümer nach
she[PRON.F.SG] had:2SG;PST the:ARD;DAT owner:M;SG after:ADV
dem **Brand** eine Entschädigung von zwei
the:ARD;DAT fire:M;SG a:ARI:F compensation:F;SG of:PRPD two:NBRC
bis drei Millionen Franken in Aussicht
to:PRPA three:NBRC million:PL francs:PL in:PRPE expectation:SG;F
gestellt.
laid:PST;PTCP.
‘After the fire, it [the insurance company] announced to the owner compensation of between two to three million francs.’

b. …Eigentümer nach dem Feuer eine
…owner[M.SG] after:ADV the:ARD;DAT fire:M;SG a:ARI:F
Entschädigung…
compensation:F;SG…
‘After the fire it [the insurance company] announced to the owner compensation…’

(6.9) a. Die Feuerwehr hatte den **Brand**
the[ARD.N.SG] firedepartment:F;SG had:3SG;PST the:ARD;ACC fire:M;SG
erst a-m Sonntag, nach 14 Stunden,
not until:ADV on:PRPE-the:ARD;DAT Sunday, after:PRPD 14 hours:PL,
unter Kontrolle.
under:PRPE control:F;SG.
‘The fire department didn’t have the fire under control until Sunday, 14 hours later.’

b. …hatte das Feuer erst
…had[3SG.PST] the:ARD;ACC fire:M;SG not until:ADV
a-m…
on:PRPE- the:ARD;DAT…
‘…didn’t have the fire under control until…’

(6.10) a. Den **Brand** in dem Altbau
the[ARD.M.ACC] fire:M;SG in:PRPE the:ARD;DAT oldbuilding:M;SG
konnte die Feuerwehr erst gestern
could:3SG;PST the:ARD;F fire department:F not until:ADV yesterday:ADV
Morgen löschen.
morning:M;SG extinguish:INF.
‘The fire department could not extinguish the fire in the old building until yesterday morning.’

b. Das Feuer in dem …
the[ARD.M] fire:M;SG in:PRPE the:ARD;DAT…
The fire in the…'

(6.11) a. Der **Brand** in einer Scheune konnte
the[ARD.M] fire:M;SG in:PRPE a:ARI;DAT barn:F;SG could:3SG;PST
aber gerade noch verhindert werden.
but:CONJS just:ADV still:ADV prevented:PST;PTCP get:INF.
'The fire in a barn was prevented just in the nick of time.'

b. Das Feuer in einer…
the[ARD.M.ACC] fire:M;SG in:PRPE a:ARI;DAT…
'The fire in a barn…'

(6.12) a. I-m Erdgeschoss eines
in[PRPE]-the:ARD;DAT earthfloor:N;SG a:ARI;GEN
Mehrfamilienhauses brach gegen 23 Uhr
morefamilyhous:N;SG;GEN broke:3SG;PST against:PRPA 23 o'clock
ein **Brand** aus.
a:ARI fire:M;SG out:SPFX.
'Around 11 pm a fire broke out on the ground floor of a multi family house.'

b. …gegen 23 Uhr ein Feuer aus.
… against:PRPA 23 o'clock a:ARI fire:M;SG out:SPFX.
'Around 11 pm a fire broke out…'

In SVCs with *geraten*, however, *Feuer* and *Brand* are not interchangeable, as the following examples illustrate.

(6.13) a. Offenbar brach das Feuer in der
apparently[ADV] broke:3SG;PST the:ARD;N fire:M;SG in:PRPE the:ARD;DAT
Küche aus.
kitchen:F;SG out:SPFX.
'Apparently, the fire started in the kitchen.'

b. Offenbar brach der Brand in der
apparently[ADV] broke:3SG;PST the:ARD;N fire:M;SG in:PRPE the:ARD;DAT
Küche aus.
kitchen:F;SG out:SPFX.
'Apparently, the fire started in the kitchen.'

(6.14) a. *Offenbar geriet die Küche in Feuer.
apparently[ADV] got:3SG;PST the:ARD;N kitchen:F;SG in:PRPE fire:M;SG.
'Apparently, the kitchen started to burn.'
b. Offenbar geriet die Küche in Brand.
apparently[ADV] got:3SG;PST the:ARD;N kitchen:F;SG in:PRPE fire:M;SG.
'Apparently, the kitchen started to burn.'

(6.15) a. I-m Erdgeschoss eines
in[PRPE]-the:ARD;DAT earthfloor:N;SG a:ARI;GEN
Mehrfamilienhauses brach gegen 23 Uhr
morefamilyhous:N;SG;GEN broke:3SG;PST against:PRPA 23 o'clock
ein **Brand** aus.
a:ARI fire:M;SG out:SPFX.
'Around 11 pm a fire broke out on the ground floor of a multi family house.'
b. I-m Erdgeschoss eines
in[PRPE]-the:ARD;DAT earthfloor:N;SG a:ARI;GEN
Mehrfamilienhauses brach gegen 23 Uhr
morefamilyhous:N;SG;GEN broke:3SG;PST against:PRPA 23 o'clock
ein Feuer aus.
a:ARI fire:M;SG out:SPFX.
'Around 11 pm a fire broke out on the ground floor of a multi family house.'

(6.16) a. Das Erdgeschoss eines Mehrfamilienhauses
the[ARD.N.SG] earthfloor:N;SG a:ARI;GEN morefamilyhous:N;SG;GEN
geriet gegen 23 Uhr in Brand.
got:3SG;PST against:PRPA 23 o'clock in:PRPE fire:M;SG.
'The ground floor of a multi family house started to burn around 11 pm.'
b. * Das Erdgeschoss eines Mehrfamilienhauses
the[ARD.N.SG] earthfloor:N;SG a:ARI;GEN morefamilyhous:N;SG;GEN
geriet gegen 23 Uhr in Feuer.
got:3SG;PST against:PRPA 23 hour in:PRPE fire:M;SG.
'The ground floor of a multi family house started to burn around 11 pm.'

In order to find possible differences between *Feuer* and *Brand*, I looked at possible modifiers for each (verbs, adjectives). The following sentences illustrate that *Feuer* and *Brand* occur with different verbs. The verb in example (6.17) is applicable to both *Feuer* and *Brand*; however, in (6.18) the verb is only used with *Feuer*.

(6.17) a. Bengalisches Feuer und riesige Leuchtfontänen
bengali[ADJ.N.SG] fire:N;SG and:CONJC gigantic:ADJ;PL lightfountains:PL
erhellten den Samstagabend und tauchten
illuminated:3PL the:ARD;ACC Saturdayevening:M;SG and:CONJC dove:3PL
die Burg in eine gespenstische
the:ARD;F castle:F;SG in:PRPE a:ARI;F;SG ghostly:ADJ;F;SG
Atmosphäre.
atmosphere:F;SG.
'Bengali fire and gigantic firework fountains illuminated the Saturday evening sky and enveloped the castle in a ghostly ambiance.'
[Cosmas II total tokens for (*Feuer* ('fire') & *erhellen* ('to illuminate')): 80]

b. Schon während der Fahrt
already[ADV] during:PRPG the:ARD;F;GEN drive:F;SG
zum Brandort fordert der
to:PRPD-the:ARD;M;DAT fireplace:M;SG requests:3SG the:ARD;M;SG
Wehrleiter Verstärkung aus Anhausen, Selters,
firechief:M;SG enforcement:F;SG from:PRPE Anhausen, Selters,
Großmaischeid und Dierdorf an, denn der
Großmaischeid and:CONJC Dierdorf on:SPFX, because:CONJC the:ARD;M;SG
Brand erhellt bereits von weitem
fire:M;SG illuminates:3SG already:ADV from:PRPD far:ADV;DAT
den Nachthimmel.
the:ARD;ACC nightsky:M;SG.
'Still on the way to the site of the blaze, the chief requests reinforcement from Anhausen, Selters, Großmaischeid and Dierdorf because he sees from affar how the fire already illuminates the night sky.'
[Cosmas II total tokens for (*Brand* ('fire') & *erhellen* ('to illuminate')): 5]

(6.18) a. Im Kamin knistert das Feuer,
in[PRPE]-the:ARD;DAT fireplace:M;SG crackles:3SG the:ARD;N;SG fire:N;SG,
draußen vor dem Blockhaus türmt
outside:ADV in front of:PRPD the:ARD;DAT loghouse:N;SG piles:3SG
sich der Schnee.
itself:PRON;REFL the:ARD;M snow:M;SG.
'The fire crackles in the fireplace and the snow piles up in front of the log cabin.'
[Cosmas II total tokens for (*Feuer* ('fire') & *knistern* ('to crackle'): 262]

b. Erst gegen 2 Uhr wurde ein
not until[ADV] against:PRPA 2 o'clock got:3SG;PST a:ARI;M;SG
Hausbewohner durch Knistern und
houseresident:M;SG through:PRPA crackling:N;SG and:CONJC
Flackern auf den Brand aufmerksam und
flickering:N;SG on:PRPE the:ARD;M;ACC fire:M;SG aware:ADJ and:CONJC
begab sich deshalb in den
adjourned:3SG;PST himself:PRON;REFL therefore:ADV in:PRPE the:ARD;ACC
Hof.
courtyard:M;SG.
'Only around 2 o'clock did a resident become aware of the fire through crackling and flickering and therefore he went to the courtyard.'
[Cosmas II total tokens for (*Brand* ('fire') & *knistern* ('to crackle')): 13]

In (6.18a), *knistern* ('crackling') modifies *Feuer*, whereas in (6.18b) *Knistern* ('crackling') is used as an independent noun and not as a modifier of *Brand*. The following table lists commonly used verbs and adjectives with *Feuer* and *Brand*. Finding verbs (or adjectives) that do occur with *Feuer* but not with *Brand*, and thus can be put into a common category, may provide an insight into why *Feuer* is not interchangeable with *Brand* in SVCs with *geraten*.

Table (6.1) List of verbs and adjectives occurring with *Feuer* and *Brand*.

	Feuer	Brand
anzünden ('to light')	x	?
ausbrechen ('to break out')	x	x
ausbreiten, sich ('to spread')	x	x
ausdehnen ('to expand')	x	x
beobachten ('to observe')	x	x
brennen ('to burn')	x	#
entstehen ('to occur')	x	x
entzünden ('to ignite')	x	x
flackern ('to flicker')	x	-

fangen (‘to catch’)	x	-
legen (‘to set deliberately’)	x	x
löschen (‘to extinguish’)	x	x
glimmen (‘to smolder’)	x	-
hervorrufen (‘to cause by’)	-	x
stecken, in (‘to set on’)	-	x
knistern (‘to crackle’)	x	-
lodern (‘to blaze/flare’)	x	-
machen (‘to make’)	x	-
offen (‘open’) (adj)	x	-
prasseln (‘to crackle’)	x	-
schüren (‘to fan/fuel’)	x	-
schwelen (‘to smolder’)	-	x
speien (‘to spew’)	x	-
verheerend (‘devastating’)	x	x
verursachen (‘to cause’)	x	x
verglimmen (‘to die away’)	x	?
vernichten (‘to destroy’)	x	x
wüten (‘to rage’)	x	x

It is possible that a *Brand* causes a *knistern* (‘crackling’), but crackling is never used as an adjectival modifier for *Brand*, although, it does with *Feuer*.

Feuer is everything that *Brand* is, plus *Feuer* can be ‘cozy’, i.e. sitting in front of a fire (crackling, flickering, etc.), but a *Brand* is never considered ‘cozy’, e.g. no one ever sits in front of a *knisternden Brand* (‘crackling fire’).

Case Study No. 2:

The second case study takes a closer look at locative prepositions with *Feuer* and *Brand* in order to determine whether prepositional usage can shed some light on why *Feuer* and *Brand* are not interchangeable in SVCs with *geraten*. A locative reading in German occurs with prepositions and the dative case, as shown in (6.19a). Using the

same proposition with the accusative case gives a motion/directional-goal reading, as shown in (6.19b).[113]

(6.19) a. Der Mann läuft in dem Dom.
the[ARD.PL] man:SG walks:1SG in:PRPE the:ARD;M;DAT;SG cathedral:SG;M.
'The man walks/runs in the cathedral.'
b. Der Mann läuft in den Dom.
the[ARD.PL] man:SG walks:1SG in:PRPE the:ARD;M;ACC;SG cathedral:SG;M.
'The man walks/runs into the cathedral.'

The following is a list of German locative prepositions. Each example uses *Feuer* and *Brand* to illustrate the acceptability of each preposition.[114]

(6.20) **bei ('at, by')**
a. Er sitzt bei dem Feuer.
he[PRON.M.SG] sits:3SG by:PRPD the:ARD;N;DAT;SG fire:N;SG.
b. Er sitzt bei dem Brand.
he[PRON.M.SG] sits:3SG by:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is sitting by the fire.'

(6.21) **auf ('on')**
a. #Er sitzt auf dem Feuer.
he[PRON.M.SG] sits:3SG on:PRPD the:ARD;N;DAT;SG fire:N;SG.
b. *Er sitzt auf dem Brand.
he[PRON.M.SG] sits:3SG on:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is sitting on the fire.'

(6.22) **an ('at, to')**
a. #Er sitzt an dem Feuer.
he[PRON.M.SG] sits:3SG at:PRPD the:ARD;N;DAT;SG fire:N;SG.

[113] The prepositions *an* ('at, to'), *auf* ('on'), *hinter* ('behind'), *in* ('in, 'into'), *neben* ('beside'), *unter* ('under'), *über* ('above, over'), *vor* ('before') and *zwischen* ('between') can be used with either the accusative or the dative case.
[114] Since *Feuer* and *Brand* are both translated as 'fire' in English, I only provide one translation of the sentences for each preposition.

b. #Er sitzt an dem Brand.
he[PRON.M.SG] sits:3SG at:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is sitting at the fire.'

(6.23) **unter ('under')**

a. #Er liegt unter dem Feuer.
he[PRON.M.SG] lies:3SG under:PRPD the:ARD;N;DAT;SG fire:N;SG.

b. #Er liegt unter dem Brand.
he[PRON.M.SG] lies:3SG under:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is lying under the fire.'

(6.24) **hinter ('behind')**

a. Er steht hinter dem Feuer.
he[PRON.M.SG] stands:3SG behind:PRPD the:ARD;N;DAT;SG fire:N;SG.

b. Er steht hinter dem Brand.
he[PRON.M.SG] stands:3SG behind:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is standing behind the fire.'

(6.25) **neben ('beside')**

a. Er singt neben dem Feuer.
he[PRON.M.SG] sings:3SG next to:PRPD the:ARD;N;DAT;SG fire:N;SG.

b. Er singt neben dem Brand.
he[PRON.M.SG] sings:3SG next to:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is singing beside the fire.'

(6.26) **zwischen ('between')**

a. Er tanzt zwischen den Feuer.
he[PRON.M.SG] dances:3SG between:PRPD the:ARD;N;DAT;SG fire:N;PL.

b. Er tanzt zwischen den Bränden.
he[PRON.M.SG] dances:3SG between:PRPD the:ARD;M;DAT;SG fire:M;PL.
'He is dancing between the fires.'

(6.27) **vor ('before')**

a. Er sitzt vor dem Feuer.
he[PRON.M.SG] sits:3SG before:PRPD the:ARD;N;DAT;SG fire:N;SG.

b. Er sitzt vor dem Brand.
he[PRON.M.SG] sits:3SG before:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is sitting before the fire.'

(6.28) **über ('above, over')**

a. Sie brät über dem Feuer.
she[PRON.F.SG] roasts:3SG over:PRPD the:ARD;N;DAT;SG fire:N;SG.

b. #Sie brät über dem Brand.
she[PRON.F.SG] roasts:3SG over:PRPD the:ARD;M;DAT;SG fire:M;SG.
'She [the goose] is cooking over the fire.'

(6.29) **in ('in/into')**

a. Er liegt in dem Feuer.
he[PRON.M.SG] lies:3SG in:PRPD the:ARD;N;DAT;SG fire:N;SG.

b. #Er liegt in dem Brand.
he[PRON.M.SG] lies:3SG in:PRPD the:ARD;M;DAT;SG fire:M;SG.
'He is lying in the fire.'

(6.30) **gegenüber von ('opposite/across from')**

a. Er sitzt gegenüber vo-m Feuer.
he[PRON.M.SG] sits:3SG opposite:PRPD of:PRPD-the:ARD;N;DAT;SG fire:N;SG.

b. Er sitzt gegenüber vo-m Brand.
he[PRON.M.SG] sits:3SG opposite:PRPD of:PRPD-the:ARD;M;DAT;SG fire:M;SG.
'He is sitting opposite the fire.'

These examples indicate that when *Brand* and *Feuer* are used with locative prepositions outside of SVCs with *geraten*, they behave in similar ways, i.e. they are almost always interchangeable. The following table summarizes these results.

Table (6.2) Locative readings with different prepositions for *Feuer* and *Brand*.

	locative preposition	*Feuer*	*Brand*
Die Frau liegt, ist, schwimmt, gräbt, sitzt, etc. (The woman lies, is, swims, digs, sits, etc.)	**bei** dem (‘by the’)	✓	✓
	an dem (‘at the’)	# (x)	? (x)
	auf dem (‘on the’)	# (x)	? (x)
	gegenüber von dem (‘opposite the’)	✓	✓
	hinter dem (‘behind the’)	✓	✓
	in dem (‘in the’)	✓	#
	neben dem (‘next to the’)	✓	✓
	über dem (‘above the’)	#	?
	unter dem (‘below the’)	✓	✓
	vor dem (‘in front of the’)	✓	✓
	zwischen den (pl) (‘between the’)	✓	✓

Depending on the verb, sentences with *Feuer* and *Brand* may be semantically odd, as in sentences like *Die Frau schwimmt unter dem Brand* (‘The woman swims below the fire’).

In the next section, I take a closer look at how *Feuer* and *Brand* behave in SVCs with *geraten*. The following examples, using *geraten* and the preposition *in* (‘in’), show that “locative and directional readings of PPs headed by *in* (‘in’) or *auf* (‘on’) are distinguished by dative and accusative case on the DP inside the PP, respectively, independent of the verb type” (Gehrke 2007: 101).

(6.31) a. Das (Puppen)Haus gerät in das Feuer.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE the:ARD;N;ACC;SG fire:SG;N.
'The (doll)house ends up in the fire.'
[German sentence: *locative/directional-goal]

b. Das (Puppen)Haus gerät in den Brand.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE the:ARD;M;ACC;SG fire:SG;M.
'The (doll)house ends up in the fire.'
[German sentence: *locative/#directional-goal]

(6.32) a. Das (Puppen)Haus gerät in Feuer.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE fire:SG;N.
'The (doll)house is catching fire.'
[German sentence: #locative/*directional-goal]

b. Das (Puppen)Haus gerät in Brand.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE fire:SG;M.
'The (doll)house is catching fire.'
[German sentence: *locative/*directional-goal]

(6.33) a. Das (Puppen)Haus gerät in ein Feuer.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE a:ARD;N;ACC;SG fire:SG;N.
'The (doll)house ends up in a fire.'
[German sentence: *locative/directional-goal]

b. Das (Puppen)Haus gerät in einen Brand.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE a:ARI;M;ACC;SG fire:SG;M.
'The (doll)house ends up in a fire.'
[German sentence: #locative/directional-goal]

In (6.31) - (6.33) *geraten* and the preposition *in* ('in', 'into') are used in conjunction with the definite article (6.31), the zero article (6.32), and the indefinite article (6.33) in the accusative case. Each usage gives a different reading of the sentence. For example, in (6.31a), using the indefinite article in the accusative case and *Feuer* gives a directional-goal reading. Omitting the article, as shown in (6.32a), creates a semantically odd sentence. The case is somewhat different when the noun *Brand* is used. In (6.31b), the locative reading is unacceptable, while the directional-goal reading is somewhat odd.

However, omitting the article as in (6.32b) renders both the locative and the directional-goal reading unacceptable. The meaning of (6.32b) is that of change, in that the (doll)house starts to burn. The difference between the accusative case usage above and the dative is illustrated in the following example where the dative follows the preposition *in* ('in', 'into').

(6.34) Das (Puppen)Haus gerät in dem Feuer/Brand.
the[ARD.N] (doll)house:SG gets:1SG in:PRPE the:ARD;N;DAT;SG fire:SG;N/M.
'The doll house is created in the fire.'

The only possible reading is that the (doll)house is being created in the fire, thus giving a locative reading. This is in step with the list of prepositions that use the dative case. Using *Brand* with an accusative article ((6.31b) and (6.33b)) gives the sentence a directional-goal reading; however, the sentence is semantically very odd. There were, in fact, no hits in COSMAS II of *Brand* in combination with the definite or indefinite article in the accusative case. This may indicate that *geraten* and *Brand* cannot combine to give a directional reading, unlike *Feuer*, which combines with the accusative article *das* ('the'). Because there does not seem to be a pattern that would explain why *Feuer* has the locative reading and *Brand* has the onset reading in SVCs with *geraten*, I argue that the meaning and usage differences of *Feuer* and *Brand* in SVCs with *geraten* are learned.

Case Study No. 3:

Finally, the third case study investigates whether nouns that are able to be used in SVCs, might also be members of one class, either de-verbal, de-adjectival, or only exist as nouns outside of SVCs. Therefore, is it possible to categorize all NPs^{tgt} into one of these categories? The following list of synonyms, subordinate terms, and superordinate terms for *Angst*, *Bewegung* and *Bedrängnis*, indicates the word type underlying the NPs^{tgt} in SVCs.[115] Examples marked with 'n' in the last column indicate nouns that only occur with the full verb meaning of *geraten* (the motion sense of *geraten*.)

Table (6.3) Synonyms, subordinate terms and superordinate terms for *Angst* ('fear'), *Bewegung* ('motion'), and *Bedrängnis* ('plight')

NPs^{tgt}		**de-verbal**	**de-adj**	**de-nominal**	**in SVC**
Angst	Existenzangst ('fear of existence')	ängstigen	-	-	y
	Gewissensangst ('fear of conscience')	ängstigen	-	-	y
	Heidenangst ('great fear')	ängstigen	-	-	y
	Lampenfieber ('stage fright')	fiebern	-	-	?
	Lebensangst ('fear of living')	ängstigen	-	-	y
	Platzangst ('claustrophobia')	ängstigen	-	-	?
	Scheissangst ('intense fear')	ängstigen	-	-	y
	Todesangst ('scared to death')	ängstigen	-	-	y

[115] The '*' symbol indicates that the verbal meaning is different than the meaning of the noun.

	Furcht (‘dread’)	fürchten	-	-	y
	Sorge (‘anxiety’)	sorgen	-	-	y
	Todesnot (‘great emergency’)	*nötigen	-	-	?
	Torschlusspanik (‘last min. panic’)	x	-	Panik	y
	Angstzustand (‘state of fear’)	x	-	Zustand	y
	Beklemmung (‘trepidation’)	beklemmen	-	-	?
	Panik (‘panic’)	x	-	Panik	y
Bewegung	Aktivistenbewegung (‘activist movement’)	bewegen	-	-	n
	Erdrutsch (‘landslide’)	rutschen	-	-	y
	Erschütterung (‘shaking’)	erschüttern	-	-	?
	Freimaurerei (‘freemasonry’)	mauern	-	-	?
	Freiheitsbewegung (‘peace movement’)	bewegen	-	-	n
	Kreislauf (‘circuit’)	laufen	-	-	y
	Luftzug (‘draft’)	x	-	Zug	y
	Manoever (‘maneuver’)	manövrieren	-	-	y
	Parade (‘parade’)	x	-	Parade	y
	Rührung (‘emotion’)	*rühren	-	-	?
	Schwingung (‘vibration’)	schwingen	-	-	y
	Stockung (‘slow down’)	stocken	-	-	y
	Taumel (‘delirium’)	taumeln	-	-	y

	Unruhe (‘restlessness’)	beunruhigen	-	-	y
	Verkehr (‘traffic’)	*verkehren	-	-	y
	Windstoss (‘wind gust’)	stossen	-	-	y
	Wirbel (‘vortex’)	wirbeln	-	-	y
	Befreiungsbewegung (‘liberation movement’)	*bewegen	-	-	n
	Betrieb (‘operation’)	betreiben	-	-	?
	Freiheitsbewegung (‘freedom movement’)	*bewegen	-	-	n
	Gang (‘motion’)	gehen	-	-	y
	Jugendbewegung (‘youth movement’)	*bewegen	-	-	n
	Regung (‘emotion’)	regen	-	-	y
	Vorwärtsbewegung (‘forward motion’)	bewegen	-	-	n
	Schwingung (‘vibration’)	schwingen	-	-	y
	Erregung (‘agitation’)	erregen	-	-	y
	Erschütterung (‘commotion’)	erschüttern	-	-	?
Bedrängnis	Termindruck (‘deadline pressure’)	*drucken	-	-	y
	Zeitnot (‘time pressure’)	*nötigen	-	-	y
	Bredouille (‘predicament’)	x	-	Bredouille	y
	Druck (‘pressure’)	*drucken	-	-	y
	Patsche (‘be in a pickle’)	*patschen	-	-	?
	Zwangslage (‘plight’)	liegen	-	-	?

Dilemma (‘dilemma’)	x	-	Dilemma	y
Krise (‘crisis’)	kriseln	-	-	y
Not[lage] (‘emergency’)	*nötigen	-	-	y
Sackgasse (‘dead end’)	x	-	Gassen	y
Schwierigkeiten (‘difficulties’)	x	-	Schwierigkeiten	y
Verlegenheit (‘embarrassment’)	verlegen sein	-	-	y

This table shows that, even though most NPs^{tgt} in SVCs are de-verbal, there is no clear correlation between de-verbal or de-adjectival derived nouns and whether they can occur in *in X geraten*.

These three case studies have shown that it is not possible to formulate systematic rules that would allow for discerning which nouns are able to function as a replacement in SVCs with *geraten*. There does not seem to be any clarity as to why *Feuer* and *Brand* cannot be substituted in SVCs with *geraten* with each other. Thus, different usages of *Feuer* and *Brand* when used in seem to be learned.

6.3.1 SVCs with *geraten* encoding unintentional change with emotion meaning

Sentences as in (6.46) exemplify SVCs with emotion nouns on an general level.

(6.35) a. Lilly gerät in Panik… .
Lilly gets:3SG in:PRPE panic:SG;F… .
‘Lilly starts to panic.’ [COSMAS II: BRZ10/JAN.01846]

b. Sie geraten in Unruhe,
you[PERS.PRON] get:3SG;FORML in:PRPE restlessness:SG;F
sobald… ?
as soon as:CONJS… ?
'Do you start to get restless as soon as... ?'
[COSMAS II: BRZ10/JUN.11574]

c. Lilly gerät in Entzücken.
Lilly gets:3SG in:PRPE delight:SG;N… .
'Lilly starts to get delighted.'

The SVCs in (6.35) are similar in form, but vary in their semantics, in that they express a change in different emotions such as *Panik* ('panic'), *Unruhe* ('restlessness'), or *Entzücken* ('delight'), respectively. The different forms of emotions in (6.35) means the nouns also have different selectional restrictions. For example, the event-frame for *Entzücken* ('delight') can be captured as in Figure (6.4):

Figure (6.4) Event-frame for NP^{tgt} *Entzücken*

Entzücken (Emotions_of_mental_activity)
Emotion (CW) positive

The event-frame for *Entzücken* in Figure (6.4) reveals that *Entzücken*, besides indicating emotion, only includes an entry for context and world knowledge and that the emotion is positive. The meanings of the sentences in (6.35) can be expressed in a more abstract pattern, as follows:

Figure (6.5) Form-meaning pairing of SVCs with *geraten* expressing an unintentional change in emotion[116]

NP Ext		(PP)	in NP^{tgt}
[Patient]	*geraten*.SV	(Agent)	[$Result_{Unint\_Emotion}$]

Figure (6.5) corresponds exactly to that in Figure (4.7) in terms of form-meaning pairing, but the difference between Figure (4.7) and Figure (6.5) is that the former expresses an unintentional change in location (unintentional change motion), while the latter expresses an unintentional change in emotion (unintentional change emotion). This semantic difference is expressed by the difference in form: the result PP in Figure (4.7) encodes location, while the nouns in the result PPs in Figure (6.5) need to be interpreted as encoding emotion (indicated by the subscript 'Unint_Emotion'). The subscript is only used to indicate that the result of the SVCs is an unintentional emotion and that all target nouns (NP^{tgt}) in Figure (6.5) evoke the `Unintentional_emotion` frame, which is the most abstract frame they have in common.[117] The `Unintentional_emotion` frame describes a situation in which an EXPERIENCER (a person or sentient being) is unintentionally in a specific STATE (described by an abstract noun) provoked by either a STIMULUS (an event, person, or state of affairs) or a TOPIC (the general area in which the

[116] The syntactic pattern in Figure (6.5) depicts the default case, i.e. other syntactic constructions may license different word order patterns. For example, it is possible to begin the sentence with the Agent PP instead of the Patient PP as in *Wegen des Kaninchens gerät das Mädchen in Freude* ('Because of the rabbit the girl becomes delighted.')

[117] As discussed in Section 6.2, each NP^{tgt} evokes a frame (e.g. *Angst* evokes the `Fear` frame or *Entzücken* evokes the `Emotions_of_mental_activity` frame). Emotion target NPs at the most abstract level evoke the `Unintentional_emotion` frame.

emotion occurs). Instead of expressing the EXPERIENCER, it is possible to have an EVENT (the occasion or happening the EXPERIENCER participates in) or an EXPRESSOR (body part, gesture or other expression reflecting the emotional state of the EXPERIENCER) in its place. Identifying the form-meaning pair at such an abstract level captures similarities in meaning, but also generates unacceptable instances as in (6.36).

(6.36) a. *[<Experiencer>Lilly] [gerät SUPP] [<Goal>in Angstneurosen[tgt]].
Lilly gets:3SG in:PRPE anxiety neurosis:PL.
'Lilly becomes anxious.'

b. ?* [<Experiencer>Sie] [geraten SUPP] [<Goal>in Spuk[tgt]].
you[PERS.PRON] get:3SG;FORML in:PRPE spook:SG;M.
'You start to get spooked.'

c. ? [<Experiencer>Die Menschen] [geraten SUPP] [<Goal>in
the:ARD;PL people:PL get:3PL in:PRPE
Wirrsal[tgt]].
confusion:SG;M.
'The people get confused.'

The examples in (6.36) are parallel to those in (6.35) and are semantically very similar to them. The difference is that the nouns encoding emotion in the latter are not acceptable substitutes in these particular contexts. In this section, I argued that the abstract SVCs with *geraten* encoding emotion are too powerful and overgenerate. I showed that substitution of the target noun with (near-) synonymous nouns does not automatically lead to acceptability. In fact, it is necessary to restrict the generation of sentences by way of event-frames. In the next section, I provide a frame-semantic analysis of the `Unintentional_emotion` frame and propose a preliminary event-frame for all SVCs with *geraten* expressing a change in emotion.

6.3.2 Frame-semantic description for unintentional change with emotion meaning - preliminary observations

The sentences in (6.35) include an emotional end point that is encoded by the noun in the result PP. The question then is: what are the similarities of SVCs with *geraten* expressing a change in emotion and at what level of abstraction can these similarities be captured? I am interested in how detailed the event-frames of nouns can be in general. In other words, what is the most abstract level at which the event-frame for all nouns that evoke the `Unintentional_emotion` frame can be listed in the mental lexicon?

The following discussion focuses on the frame-evoking noun in the PP[tgt]. More specifically, I investigate what types of restrictions apply to emotion nouns in general. Consider the following sentences that illustrate an unintentional change in emotion.

(6.37) a. … und [<Patient>die Menschen] [<Goal>in
… [and:CONJC] the:ARD;PL people:PL in:PRPE
Verwirrung[tgt]] [geraten Supp],...
confusion:SG;F get:3PL,…
'… and the people get confused, ...' [A98/FEB.09983]

b. [<Patient>Die Frau] [geriet SUPP] [<Cause>wegen
the[ARD.SG.M] woman:SG;F got:3SG;PST because of:PRPE
der Aussage des Mannes]
the:ARD;SG;GEN;F statement:SG;F the:ARD;SG;GEN;M man:SG;GEN;M
[<Goal>in Empörung[tgt]].
in:PRPE irritation:SG;F.
'The woman got irritated by the statement made by the man.'

c. [<Patient>Die Frau] [gerät SUPP] [<Cause>wegen
the[ARD.SG.M] woman:SG;F gets:3SG because of:PRPG
des jungen Hundes] [<Goal>in
the:ARD;SG;GEN;M young:ADJ;SG;GEN;M dog:SG;M in:PRPE
Entzücken[tgt]].
elation:SG;N.
'The woman becomes elated because of the young dog.'

The frame-evoking noun in each of the sentences in (6.37) indicates that they can encode a negative or positive change in emotion. In (6.37a) and (6.37b), for example, the result stages are both negative. In contrast, (6.37c) conveys a positive result -- the woman is elated. It is possible to use *Erstaunen* ('amazement') in either a positive (6.38a), or negative statement (6.38b).

(6.38) a. [<Patient>Die Zuschauer] [geraten SUPP] [<Cause>durch
the[ARD.PL] spectators:PL get:3PL through:PRPA
die einmalige Zirkusshow]
the:ARD;SG;ACC;N unique:ADJ;SG;ACC;F circusperformance:SG;F
[<Goal> in Erstaunen].
in:PRPE amazement:SG;N.
'The spectators are amazed by the circus performance.'

b. [<Patient>Der Richter] [geriet SUPP] [<Cause>durch
the[ARD.SG.M] judge:SG;M got:3SG;PST through:PRPA
die grosse Dummheit der
the:ARD;SG;ACC;F big:ADJ;SG;ACC;F stupidity:SG;F the:ARD;SG;GEN;F
Jugendlichen] [<Goal>in Erstaunen].
teenagers:PL;GEN in:PRPE surprise:SG;F.
'The judge is amazed by the tremendous stupidity exhibited by the teenagers.'

In (6.38a), the circus performance is so exquisite that the spectators are positively amazed, while in (6.49b), the judge is dumbfounded by the stupidity of the teenagers.

Only Figure (6.5) encodes emotion in the Result PP and as such generates unacceptable sentences as in (6.39), even though they satisfy all the syntactic criteria included in Figure (6.5). The question then is whether such restrictions on the constructional SVC sub-meaning level sufice to restrict the production of unacceptable sentences. Consider the following sentences.

(6.39) a. ?#Der Klavierspieler geriet in-s
the[ARD.SG.M] pianoplayer:SG;M got:3PL;PST in:PRPE-the:ARD;SG;ACC;N
Lampenfieber.
stagefright:SG;N.
'The pianist started to have stagefright.'

b. ?#Die Frau geriet wegen
the[ARD.SG.F] woman:SG;F got:3SG;PST because of:PRPG
der kleinen Katzen in Rührung.
the:ARD;SG;ACC;N little:ADJ;PL;GEN cats:PL;GEN in:PRPE emotion:SG;F.
'The woman started to get emotional because of the kittens.'

c. *Der Patient geriet wegen
the[ARD.SG.M] patient:SG;M got:3SG;PST because of:prpg
der schweren Operation in
the:ARD;SG;GEN;F heavy:ADJ;SG;GEN;F operation:SG;F in:PRPE
Beklemmung.
trepidation:SG;F.
'The patient started to get anxious because of the difficult operation.'

Each of the frame-evoking nouns in the final PP clearly falls within the restriction that the noun must express an emotion. Example (6.39a), for instance, indicates that the pianist has *Lampenfieber* ('stage fright'). The woman in (6.39b) gets emotional because of the kittens, while in (6.39c) the patient becomes anxious about the difficult operation.[118]

All the sentences in (6.39) are semantically odd or unacceptable to some degree. It is clear that the single restriction, that the NP^{tgt} only needs to encode emotion, is not sufficient to block generation of semantically odd SVCs with *geraten*.

[118] All sentences in (6.39) indicate a prototypical change in emotion. This means that we only know that the agent PP is responsible for the emotional change in the patient and not what the agent PP did in order to provoke the emotional response. The reason must be either stated explicitly or embedded in the context.

6.3.3 Event-frame of nouns in SVCs with *geraten* encoding unintentional change with emotion meaning

In this section, I investigate the event-frames of emotion nouns at the most abstract level in order to illustrate that selectional restrictions must be captured by the event-frame of the frame-evoking NP^{tgt} in order to avoid unacceptable sentences as shown in (6.40).[119] All sentences in (6.40) are licensed by Figure (6.5) with an event-frame listed in Figure (6.6) that restricts the target NP slot to nouns that only encode emotion.

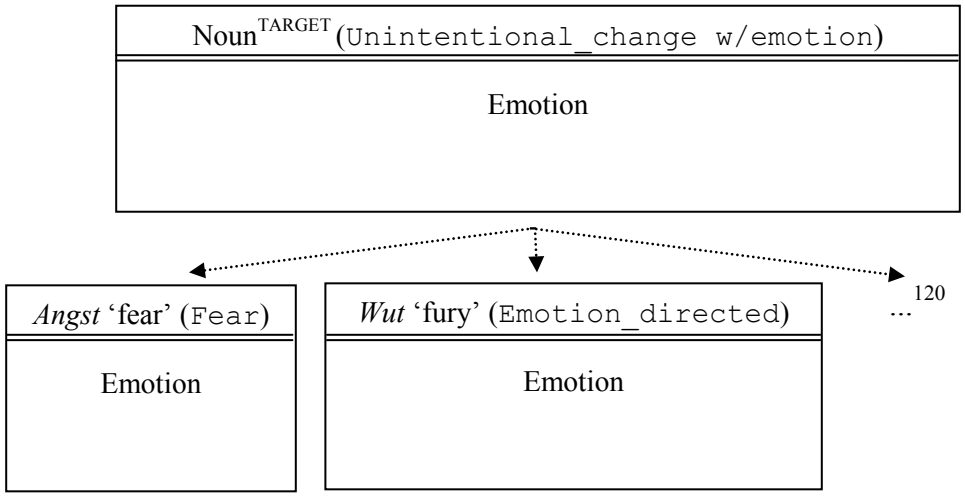
(6.40) a. Einige Eltern gerieten in Sorge^{tgt}.
some[PRON] parents:PL got:3PL in:PRPE worry:SG;F.
'Some parents began to worry.'
b. Einige Eltern gerieten in Furcht^{tgt}.
some[pron] parents:PL got:3PL in:PRPE dread:SG;F.
'Some parents got scared.'
c. *Einige Eltern gerieten in Furchtsamkeit^{tgt}.
some[pron] parents:PL got:3PL in:PRPE timidity:SG;F.
'Some parents became timid.'

Figure (6.6) shows that the default event-frame for nouns in SVCs with *geraten* encoding emotion only indicate emotion in order to be used felicitously; therefore, the frame indicated in the top row in Figure (6.6) is the `Unintentional_emotion` frame. The bottom row in Figure (6.6) only lists two of the possible nouns indicating emotion with their default event-frames. Figure (6.6) allows for the usage of any noun that encodes emotion, therefore generating infelicitous sentences as (6.40c). Also, the

[119] Remember that unintentionality is contributed by the support verb *geraten* at the constructional level and is, therefore, not part of the nominal event-frame.

Unintentional_emotion frame is the abstract frame that is evoked by all emotion nouns in SVCs with *geraten* encoding emotion. In fact, each NP[tgt] in (6.40a) - (6.40c) evokes a different frame, e.g. *Sorge* ('worry') in (6.40a) evokes the Emotion_active frame, while *Furcht* ('dread') evokes the Fear frame, or, more specifically, the Unintentional_Emotion_active frame and the Unintentional_Fear frame, respectively.

Figure (6.6) Emotion NPs[tgt]



The arrows in Figure (6.6) indicate that event-frames allow all nouns to be used in SVCs with *geraten* as long as the NPs[tgt] encode an emotion.[121] The frame evoked by *Angst* in SVCs is the Unintentional_fear frame as discussed in detail in Section 6.3.1,

[120] The Unintentional_fear frame and the Unintentional_emotion_directed frame only illustrate two possible event-frames. The three dots indicate that an event-frame, as given in the top box in Figure (6.6), allows every emotion noun to be included in SVCs with *geraten* encoding an unintentional change in emotion.
[121] *Angst* ('fear') and *Wut* ('fury') are only two specific event-frames used for illustrative purposes.

while *Wut* evokes the `Unintentional_emotion_directed` frame.[122] Having only the restriction 'Emotion' in the event-frame as listed in the top box in Figure (6.6) means that any emotion noun can fill the NP^{tgt} slot as indicated by (…). This restriction alone is not sufficient to disallow the formation of unacceptable sentences; therefore, the event-frames must include more precise restrictions.

6.3.4 General semantic islands of nouns indicating an emotion

I posit semantic islands as a purely descriptive tool that allows me to capture all the necessary restrictions imposed by the event-frame of each noun in SVCs with *geraten*. The semantic islands are not stored in the lexicon. An example of nouns that can be replaced for *Angst* in the SVC *in Angst geraten* is given in (6.44) below. Semantic islands are clusters of nouns which express similar meanings. Membership in semantic islands is established in that its members are cognitive synonyms whose semantic co-occurrence restrictions are logically necessary.[123] Cruse (1989: 88) defines cognitive synonymy as follows:

> X is a cognitive synonym of Y if (i) X and Y are syntactically identical, and (ii) any grammatical declarative sentence S containing X has equivalent truth-conditions to another sentence S, which is identical to S except that X is replaced by Y.

[122] Outside of SVCs with *geraten, Angst* and *Wut* evoke the `Fear` and the `Emotion_directed` frames, respectively. For a full description of the `Emotion_directed` frame, see Appendix D.
[123] Cruse (1989) terms this type of semantic co-occurrence restriction *selectional restrictions*.

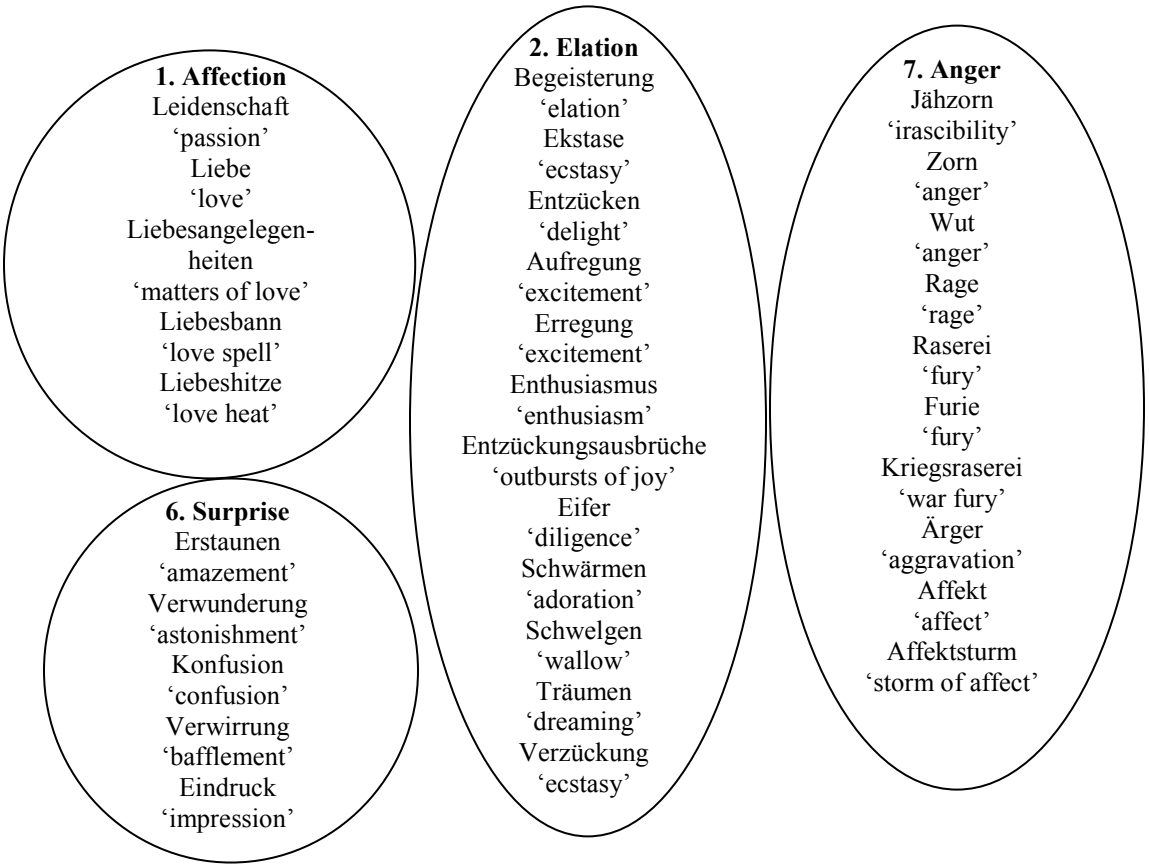
For example, *fiddle* and *violin* are cognitive synonyms for Cruse (1989), since these are incapable of yielding sentences with different truth-conditions. *He plays the violin very well* entails and is entailed by *He plays the fiddle very well* (Cruse 1989: 88).[124] Logically necessary semantic co-occurrence restrictions are exemplified by the following example: it is possible to say without oddness that things can only die which are (1) organic, (2) alive, and possibly also (3) mortal (Cruse 1989: 278).

It is understood that each semantic island has its own criteria to determine membership. For example, semantic island 6 in Figure (6.7) contains only cognitive synonyms whose semantic co-occurrence restrictions include surprise (e.g. *Erstaunen* ('amazement'), *Verwunderung* ('astonishment'), or *Verwirrung* ('bafflement')), i.e. the clusters are formed according to some inherent attributes that are similar in all the member nouns and express a semantic relationship to each other either as synonymy, near-synonymy, sub-meanings, umbrella terms, or hyponymy.[125] The following nouns can be included in the semantic island *sun*: *Sonnenschein* ('sunshine'), *Höhensonne* ('sun lamp' or 'altitude sun') (synonyms), *Himmelskörper* ('celestial body') (umbrella terms), and *Mitternachtssonne* ('midnight sun'), *Sonnenkugel* ('lit. sun ball'), (sub-meanings) because they all describe the concept *sun* to a lesser or higher degree and could be used as substitute nouns for *sun*. Using any of these words would evoke an image in which the

[124] Depending on the speaker, *violin* and *fiddle* have very different meanings and are not regarded as cognitive synonyms.
[125] See Cruse (1986) and Saeed (2003), among others, for detailed discussions of synonymy and hyponymy.

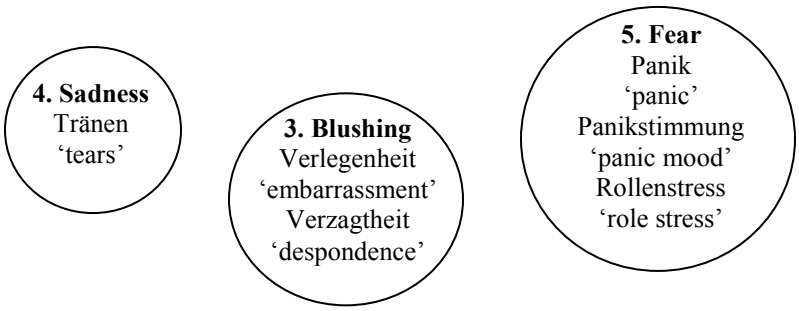
sun plays a central part. According to this view, the islands in Figure (6.7) are formed according to some semantic similarity of their members (e.g. affection).[126]

Figure (6.7) Semantic Islands of emotion NPs[tgt127]



[126] For a semantic island, the shared meaning is between its members, and for semantic fields, it is the conceptual domain. Semantic islands are different from semantic fields, which Lehrer (1985: 283) defines as "a set of lexemes which cover a certain conceptual domain and which bear certain specifiable relations to one another." (For a more in-depth discussion of semantic fields, see Kittay & Lehrer (1981), Lehrer (1985), or Lyons (1995), among others). That is, semantic fields share certain semantic properties such as words describing body parts or colors. Semantic fields also differ from semantic islands in that semantic fields do not contain synonyms, but rather words that are related to a certain phenomenon. For example, if someone uses the words *heart*, *love*, *music*, *flower*, and *passion* in a text, then these words could be defined as belonging to the semantic field 'love' (e.g. *flower* is not a (near-) synonym for either *music* or *heart*). Semantic fields and semantic islands are also similar in that they categorize the world according to meaning similarity.

[127] Not all semantic islands are illustrated here. For a full list, see Appendix E



The semantic islands shown above represent broad categories to which target NPs in the unintentional change in emotion SVC with *geraten* belong. It is possible that smaller categories exist depending on how meaning specific the division between nouns is made. SVCs with *geraten* encoding emotion allow for some nouns to express either a negative or a positive emotional change depending on the context as shown in (6.38). This makes contextual knowledge crucially important, because neither the SVC nor the default event-frame can state that the emotion noun must be negative or positive. Stating an additional restriction in the event-frame in (6.40), e.g. negative, would exclude all emotion nouns that express a positive change in emotion, e.g. *Freude* ('happiness'). Next, I turn to a brief discussion of Langacker's (2000) notion of networks in a dynamic usage-based model.

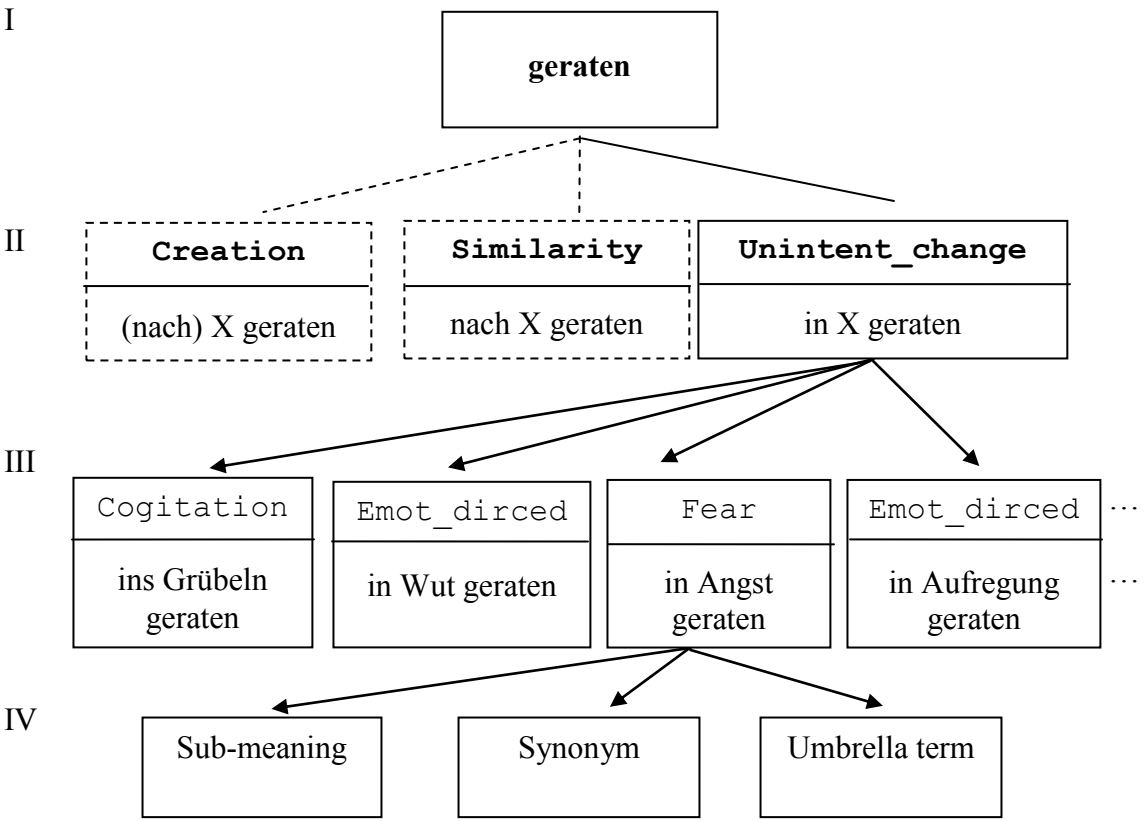
6.4 Network

Using the notion of networks, it is possible to show that SVCs with *geraten* are linked with each other semantically and that they can form what Langacker terms a complex category network. That is, novel SVCs are related to the respective sense

through categorization.[128] A network, according to Langacker (2000), involves the linkage of conventional units by categorizing relationships. That is, "linguistic structures of any kind and size are linked by categorizing relationships […] and might consist of allophones of a phoneme, or variant forms of an elaborate grammatical construction" (Langacker 2000: 13).

The following figure shows how the verb *geraten* at the most abstract level is related to the most concrete example in *in Angst geraten*.

Figure (6.8) Schematic representation of SVC *in Angst geraten*



[128] According to Langacker (2000), usage events can be categorized as well-formed or ill-formed depending on whether a novel utterance is deemed appropriate in categorizing a particular facet of a usage event.

Figure (6.8) illustrates the different sub-meanings of SVCs with *geraten* with specific focus on the SVC expressing a change in emotion and very specifically that of the emotion of *Angst* ('fear'). The topmost level (Level I) contains *geraten* as a base verb and the levels below are specific instances of *geraten* that inherit certain features from the higher levels (cf. Chapter 3.2.2). At Level II we see the three central senses of *geraten*, in which *geraten* acts as a full verb in the senses of creation, resemblance, and unintentional change. At Level III several concrete-conventionalized expressions are given. *Ins Grübeln geraten* ('start to ponder') on the left hand side of Level III indicates an idiomatic SVC.[129] This means that noun substitution is not possible without loss of acceptability and/or meaning of the original sense; however, morphosyntactic flexibility is possible (see the discussion of Storrer in Chapter 2).[130] The other three expressions (*Angst* ('fear'), *Wut* ('fury'), and *Aufregung* ('excitement')) allow for different nouns to be replaced without causing the SVCs to be unacceptable. Level IV abstractions list only the sub-meanings, synonyms, and umbrella terms for *Angst* ('fear').

The network view of SVCs allows to account for the construction of novel instances by means of semantic linkage. Thus, SVCs that encode the emotion meaning are related to each other at the concrete-conventional level (Level III).

[129] Since *ins Grübeln geraten* is an idiomatic SVC there would be no Level V and VI attached to it, i.e. there would be no sub-meaning, synonyms, or umbrella (superordinate) terms listed.
[130] Abeillé (1995), using the French idiom *perdre les pédales* ('to get confused') as an example, states that "an idiomatic part cannot be used with the same meaning outside of the idiomatic expression" (Abeillé 1995: 16). I term SVCs in which the NP^{tgt} cannot be replaced by a synonym idiomatic SVCs because replacing the NP^{tgt} would either lead to unacceptability or a change in meaning as in *in Brand/Feuer geraten*. For more information on idioms, see Nunberg (1978), Nunberg et al. (1983), Gibbs (1985), and Levorato (1993), among others.

6.5 Productivity continuum of emotion nouns[131]

In this section, I propose that NP^{tgt} of SVCs can be placed on a continuum indicating their level of productivity in SVCs. The goal of this section is to determine if the specificity of the emotion encoded in the target noun plays a role for the restrictions listed in the event-frame and the level of productivity exhibited by the noun. Productivity refers to the ability to create novel sentences as, for example, by "using new or hypothetical verb forms" (Goldberg 1995: 120). An example is morphological productivity, which refers to the ability of, for example, a suffix to attach to a verb in order to create nouns. Adopting this view, I use productivity to refer to the ability of target nouns in SVCs with *geraten* to have substitutes, i.e. different target NPs allow for a different number of replacement nouns in the SVC. NPs^{tgt} form clusters in which the nouns are relatively similar in meaning.[132] I propose that slots for target NPs in SVCs that exhibit greater productivity also contain fewer restrictive selectional restrictions in the event-frame. Consider the following sentence pairs.

[131] The following section only focuses on a select few emotion nouns. For a full list, see Appendix F.
[132] The view of productivity given here is very narrow. Barðdal (2008) provides an in-depth discussion of productivity and presents an overview of the different senses and usages of productivity in the literature. I mention only a few here to illustrate the wide range of usages of productivity. According to Barðdal, Fleischer (1982) uses productivity to mean high occurrences of a particular prefix. Pinker (1999) equates productivity with regularity and Leonard (2000) as rule-based. For Fromkin & Rodman (1995) productivity means having wide coverage, while O'Grady et al. (2001) use productivity to indicate ease of combinability. Kay & Fillmore (1993) equate productivity with schematicity. For discussions regarding productivity in different areas of linguistics, see Baayen & Lieder (1991), McGlone et al. (1994), Goldberg (1995), Bybee (1995), Bolozky (1999), Langacker (2000), Svanlund (2007), and Barðdal (2008), among others. For a discussion of partial productivity/productivity, see Langacker (1987), Pinker (1989), Bybee (1985), and Langacker (1991), among others.

(6.41) a. Der Student geriet in-s
the[ARD.SG.M] student:SG;M got:3SG;PST in:PRPE-the:ARD;SG;ACC;N
Grübeln.
pondering:SG;N.
'The student started to ponder.'

b. Der Student geriet in-s
the[ARD.SG.M] student:SG;M got:3SG;PST in:PRPE-the:ARD;SG;ACC;N
Denken.
thinking:SG;N.
'The student started to think.'

Even though (a) and (b) seem to be similar in meaning because both NP^{tgt} encode some form of mental activity, they are not equivalent.[133] In fact, there is no synonym, sub-meaning, or umbrella term for *Grübeln* and even though (6.41b) is perfectly acceptable, *Denken* is not an acceptable noun substitute for *Grübeln* in SVCs, meaning that the SVC *ins Grübeln geraten* represents an idiomatic form and is lexicalized as such. Thus, the event-frame for *Grübeln*, given in Figure (6.9), only includes the entries emotion, CW, and IDIOM since no other information is needed.

Figure (6.9) Event-frame for *Grübeln* ('Cogitation')

Grübeln (Cogitation)
Emotion (CW) IDIOM

[133] Even though *Grübeln* and *Denken* are very close semantically, the difference between the two activities is significant.

The entry IDIOM in the event-frame prohibits any noun from replacing *Grübeln* in the SVC. The situation is different when looking at SVCs in which the NP^{tgt} slot allows for more noun substitutes, such as *Erregung* ('excitement').

(6.42) a. Die Zuschauer gerieten wegen des
the[ARD.PL] spectators:PL got:3PL;PST because of:PRPG the:ARD;SG;GEN;M
Clowns in Erregung.
clown:SG;M in:PRPE excitement:SG;F.
'The spectators became excited because of the clown.'

b. Die Zuschauer gerieten wegen des
the[ARD.PL] spectators:PL got:3PL;PST because of:PRPG the:ARD;SG;GEN;M
Clowns in Begeisterung.
clown:SG;M in:PRPE elation:SG;F..
'The spectators became elated because of the clown.'

Erregung ('excitement') has several near-synonyms such as *Begeisterung* ('elation'), *Aufregung* ('excitement'), *Verzückung* ('ecstasy'), and *Ekstase* ('ecstasy'). Even though these *Erregung* and *Begeisterung* do not express exactly the same meaning, they are sufficiently close to make *Begeisterung* in (6.42b) an acceptable replacement for *Erregung* in (6.42a).

The different levels of abstraction for each SVC, as discussed above, show how each more concrete level inherits certain semantic information from the level above it. Figure (6.10) shows a more detailed abstraction of the unintentional change with emotion sense SVC. I use the emotion nouns *Rage* ('rage'), evoking the `Emotion_directed` frame[134] and *Affekt* ('affect'), evoking the `Objective_influence` frame,[135] as

[134] The adjectives and nouns in this frame describe an EXPERIENCER who is feeling or experiencing a particular emotional response to a STIMULUS or TOPIC. There can also be CIRCUMSTANCES under which the response occurs or a REASON that the STIMULUS evokes the particular response in the EXPERIENCER.

illustration. The split at Level IIIa is caused by the differentiation in WordNet between *rage* (a feeling of intense anger) and *affect* (the conscious subjective aspect of feeling or emotion). In addition, Figure (6.10) follows the WordNet entries of each noun with omissions for readability purposes.

Definition taken from FrameNet [http://framenet.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Perception_experience].

[135] The `Objective_influencing` frame describes a scenario in which "an INFLUENCING_VARIABLE, an INFLUENCING_SITUATION, or an INFLUENCING_ENTITY has an influence on a DEPENDENT_ENTITY, DEPENDENT_VARIABLE, or a DEPENDENT_SITUATION." Definition taken from FrameNet [http://framenet.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Perception_experience].

Figure (6.10) Modified WordNet entries of *Rage* ('rage') and *Affekt* ('affect')[136]

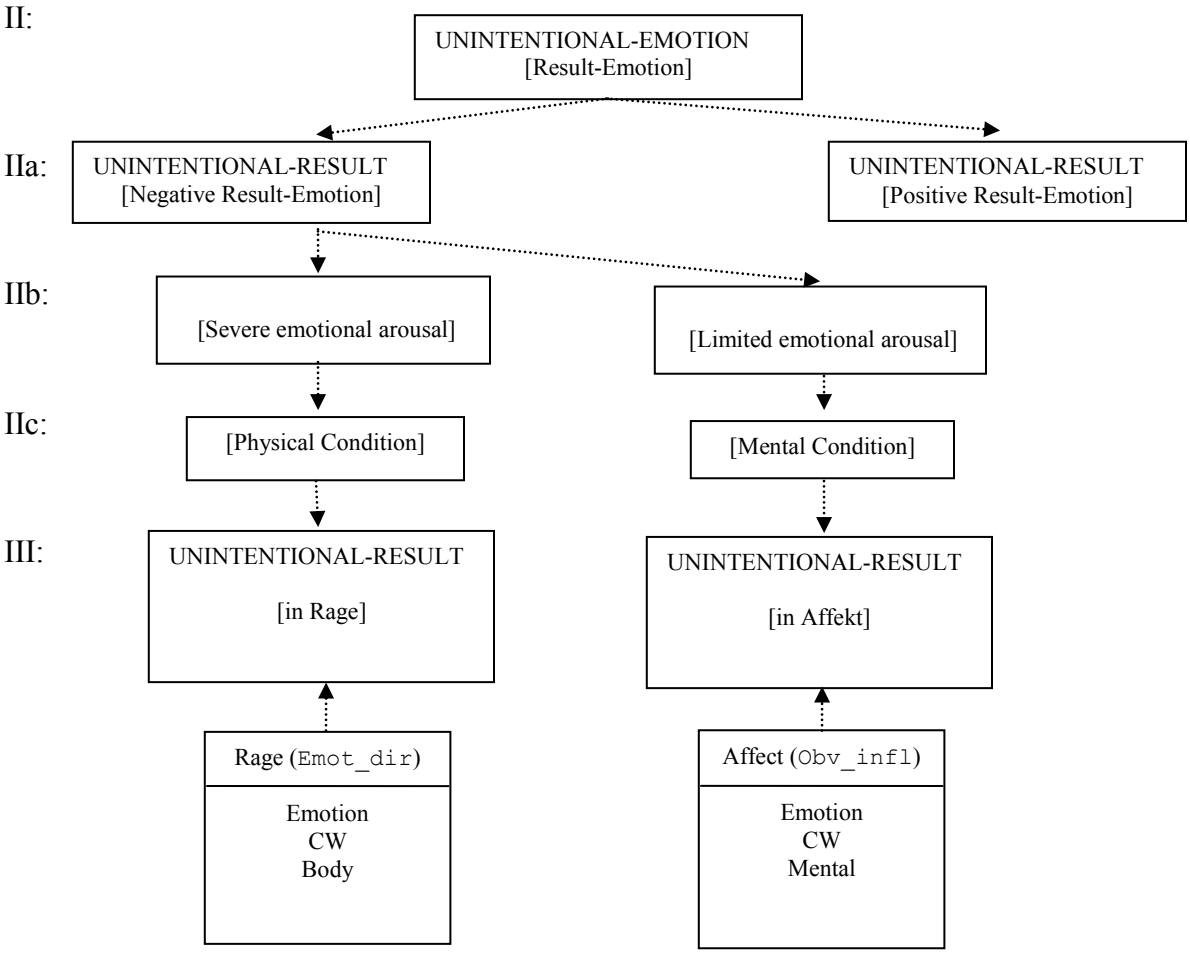


Figure (6.10) shows how the SVC with *geraten* encoding an unintentional change in emotion is further divided into more concrete levels. The graph starts at abstraction Level II, the level where the three different sub-meanings of the SVCs are distinguished (see Figure 6.3). Level IIa shows that an unintentional result can either be a negative result (*Panik* ('panic')) or a positive result (*Lachen* ('laughing')). At Level IIb, negative result emotions are separated into severe emotional arousal and less severe emotional arousal.

[136] Adapted from WordNet [http://wordnetweb.princeton.edu/perl/webwn]. For the WordNet entries of *rage* and *affect*, see Appendix G.

Level IIc shows that severe emotional arousal manifests itself as a physical condition, i.e. an emotional state seeks a physical outlet, while less severe emotional arousal leads to a mental condition, which means that the entity undergoing the emotional change 'only' exhibits negative mental changes. Finally, at Level III the specific NPs^{tgt} *Rage* and *Affekt* come into play. The arrow pointing from the event-frame to Level III indicates that specific selectional restrictions apply in order for nouns to be able to fill the specific NP^{tgt} slot. In the case of severe emotional arousal, it is *Rage* ('rage') while limited emotional arousal allows for the noun *Affekt* ('affect') to fill the slot. It is not possible to use *Rage* on the right side because *Rage* does not encode a 'limited emotional arousal', which means that *Rage* cannot be used in an SVC to describe a person who is only slightly agitated. The continuum for emotion nouns is given in Figure (6.11).

Figure (6.11) Continuum of SVCs with *geraten* encoding emotion[137]

According to the argument in Figure (6.11), frozen SVCs exhibit zero substitutability, while more "productive" SVCs allow for varying degrees of substitute nouns to occur in

[137] The numbers following each noun indicate the number of nouns that can be used as substitutes for the given target noun.

the NP target slot. Substitutability of individual nouns is not the same even though they may appear on the same spot in the continuum. Substitute nouns here means that these nouns are possible candidates to form novel SVCs with *geraten* with the same or similar meaning as the original noun.[138] For example, nouns listed under the second dot on the continuum in Figure (6.11) have about the same number of replacement nouns available, e.g. both *Erstaunen* ('amazement') and *Verzückung* ('ecstasy') have only one possible substitute, while *Verlegenheit* ('embarrassment') has two (see Appendix H.2a, H.2b, and H.2f). The clusters were formed by adding up possible substitutes for each noun listed. Finally, the productive SVC (and its NP^{tgt} slot) *Erregung* ('excitement') allows for fifteen nouns as substitutes. Observe that *Grübeln* on the far left exemplifies an idiomatic SVC, meaning that the noun in this particular SVC is frozen and cannot be replaced.

Sag et al. (2001) propose several categories of multiword expressions, one of which is light verb constructions (LVC) (e.g. *make a mistake*, *give a lecture*, etc.) and are roughly the English equivalent to German SVCs. According to Sag et al., light verb constructions are part of syntactically-flexible expressions and are highly idiosyncratic. They further state that in terms of NLP analysis a fully compositional approach would not be able to model the use of alternative light verbs and treating LVCs as words with spaces does not account for all possible instances since LVCs allow for full syntactic variability (e.g. passivization, extraction, or internal modification). In addition, Abeillé

[138] For a list of substitutes, see Appendix H. Some substitute nouns listed as acceptable may not always be accepted by all speakers.

(1988) argues that it is difficult to predict which light verb selects a given noun.[139] The SVCs I term 'idiomatic SVCs' (e.g. *ins Grübeln geraten*) may be treated as fixed expressions or decomposable idioms. Since they undergo syntactic variation, especially inflectional variation, it may be difficult to treat them as words with spaces.

This brief comparison of SVCs to the proposed categories by Sag et al. (2001) shows that SVCs cannot be categorized as belonging strictly to one category. A major difference between the analysis of Sag et al. and mine, is that Sag et al. focus on the variability of the verb in LVCs, while I am interested in the selectional restrictions of the NP^{tgt} slot. Thus, the categories proposed by Sag et al. may not be directly suitable to categorize SVCs in my analysis. The next two sections focus on a brief discussion of SVCs with *geraten* encoding an unintentional change in situation (Section 6.6.1) and an unintentional onset of an event (Section 6.6.2), since these sub-meanings work in parallel to unintentional change in emotion.

6.6 Selectional Restrictions in SVCs with *geraten* encoding an unintentional change of an event with situation and onset meaning

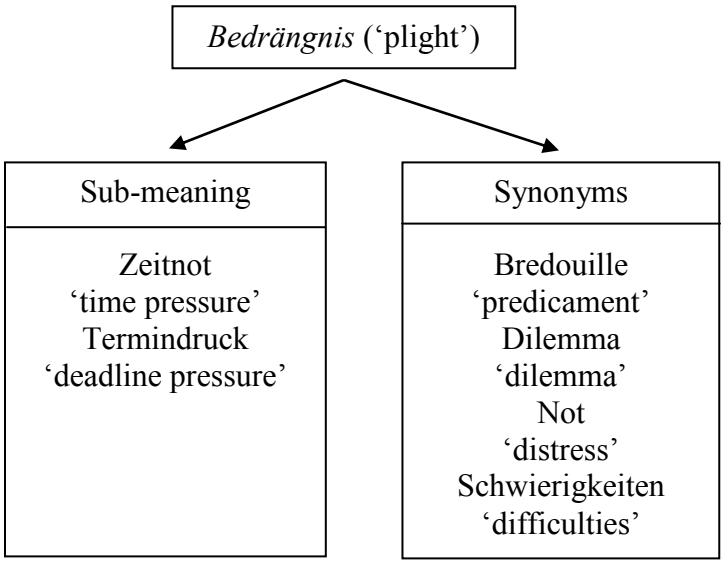
Following the outline of the previous sections, I briefly discuss selectional restrictions of the other two SVC subtypes. To avoid repetition, the discussion that follows is somewhat abbreviated.

[139] Ruppenhofer et al. (2010) argue that it is the noun that selects the support verb and not the support verb that selects the noun.

6.6.1 Analysis and proposal for SVC *in Bedrängnis geraten*

Figure (6.12) shows synonyms and sub-meanings for *Bedrängnis* ('plight') that may be acceptable replacements for *Bedrängnis*. Similarities between these nouns should aid in formulating an event-frame that restricts substitution of *Bedrängnis* with unacceptable near-synonyms and at the same time allow acceptable nouns to fill the NP^{tgt} slot held by *Bedrängnis*.

Figure (6.12) Excerpt of corpus data for NP^{tgt} *Bedrängnis*.[140]



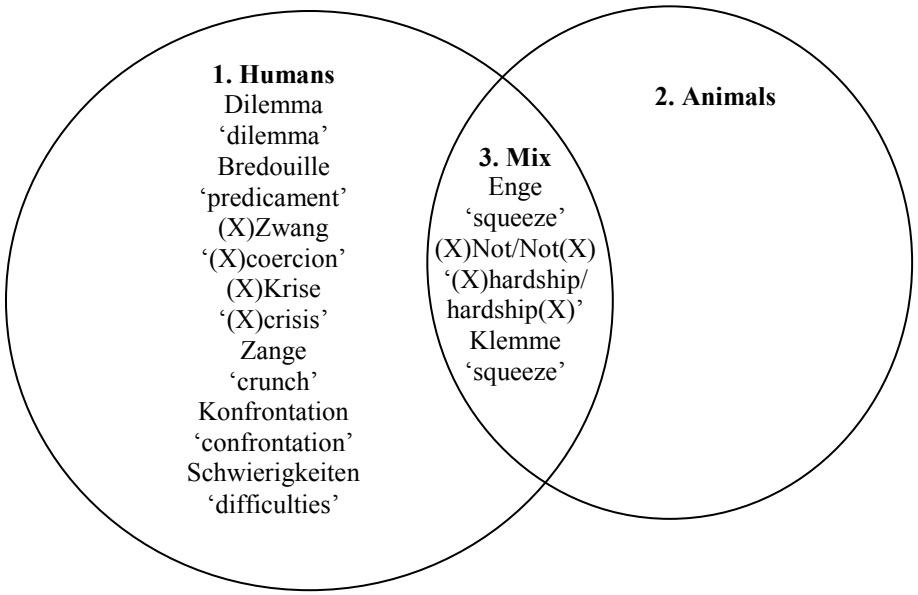
(6.43) a. [<Patient>Der Student] [gerät SUPP] [<Goal>in
the[ARD.SG.M] student:SG;M gets:3SG in:PRPE
Not^{tgt}].
distress:SG;F.
'The student becomes distressed.'

[140] The data in Figure (6.12) is taken from DWDS (http://www.dwds.de).

b. [<Patient>Der Student [gerät SUPP] [<Goal>in
the[ARD.SG.M] student:SG;M gets:3SG in:PRPE
Zeitnot[tgt]].
timedistress:SG;F.
'The student becomes pressed for time.'

Both sentences in (6.43) exhibit the pattern [[NP] *geraten* [[in][NP]]]. Nouns listed in Figure (6.12) may be used as substitutes for *Bedrängnis*. Semantic islands for target nouns replacing *Bedrängnis* are given in Figure (6.13) and include nouns representing near-synonyms of *Bedrängnis*.[141]

Figure (6.13) Semantic islands of near-synonyms for *Bedrängnis*.



[141] "Mix" in semantic island 3 means that the nouns listed are applicable to both humans and animals.

Nouns in this SVC must refer to animate objects since inanimate objects, like a vase, cannot be *bedrängt* e.g. *#Die Vase geriet in Not* (#'The vase ended up in distress.').[142] If they express a more specific instance of distress, then most of them can only be used to describe a situation a human is in (e.g. *Dilemma* ('dilemma') or *Zange* ('crunch')), thus the unacceptability of (6.45c). Context and world knowledge (CW) is crucially important in this construction, since it helps determine whether the SVC has a negative or positive interpretation.

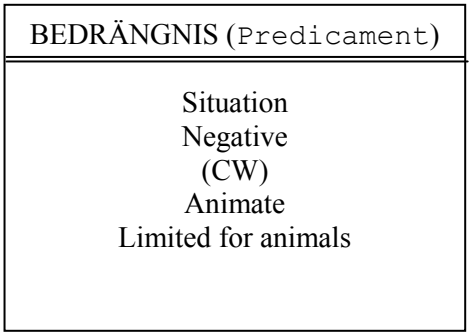
(6.44) a. [<Patient>Der junge Mann] [gerät SUPP]
the[ARD.SG.M] young:ADJ;NOM;SG;M man:SG;M gets:3SG
[<Goal>in ein Dilemma].
in:PRPE a:ARI;SG;ACC;N dilemma:SG;N.
'The young man gets into a dilemma.'

b. [<Patient>Der Hund [gerät SUPP] [<Goal>in eine
the[ARD.SG.M] dog:SG;M gets:3SG in:PRPE a:ARI;SG;ACC;F
Klemme].
squeeze:SG;F.
'The dog gets into an awkward position.'

By analyzing the given synonyms and sub-meanings for *Bedrängnis*, the following event-frame, which is broad enough to allow synonym and sub-meaning substitutions, but also restrictive enough to prevent the creation of semantically unacceptable sentences as in (6.45c) and (6.45d), can be formulated.

[142] In some rare instances, they can also be used when referring to animals (e.g. *Enge* ('squeeze'), *Klemme* ('squeeze'), or *Not* ('distress')) and tend to express the general concept of being in distress (e.g. 6.44b).

Figure (6.14) Event-frame for NP^{tgt} *Bedrängnis*



(6.45) a. Max geriet in Not.
Max got:3SG;PST in:PRPE distress:SG;F.
'Max got into distress.'

b. Der Hund geriet in die
the[ARD.SG.M] dog:SG;M got:3SG;PST in:PRPE the:ARD;SG;ACC;F
Enge.
narrowness:SG;F.
'The dog ended up in a squeeze.'

c. *Der Hund geriet in ein
*the[ARD.SG.M] dog:SG;M got:3SG;PST in:PRPE a:ARI;ACC;N
Dilemma.
dilemma:SG;N.
*'The dog ended up in a dilemma.'

d. *Der Wagen geriet in Konfrontation.
*the[ARD.SG.M] car:SG;M got:3SG;PST in:PRPE confrontation:SG;F.
*'The car got into a confrontation.'

The sentences in (6.45) illustrate the constraints imposed by the event-frame of *Bedrängnis* on noun substitutes. The first two constraints in Figure (6.14) are imposed by the SVC itself. In (6.45a), for example, Max is in distress either because of something he did or through no fault of his own. But because neither the context nor the agent PP is provided, it is impossible to know why Max got into distress. Similarly, in (6.45b) we know that the dog is in some sort of predicament, but the lack of contextual cues or an

agent PP leaves only speculation as to why. Both (6.45c) and (6.45d) are semantically unacceptable since dilemma is not applicable to dogs and a car cannot get into a confrontation with something or someone. However, certain nouns are possibly compatible with the use of inanimate objects, such as in (6.46).

(6.46) a. Das Boot geriet in Not.
the[ARD.SG.N] boat:SG;N got:3SG;PST in:PRPE distress:SG;F.
'The boat got into distress.'
b. Die Wirtschaft geriet in eine Kriese.
the[ARD.SG.F] economy:SG;F got:3SG;PST in:PRPE a:ARI;ACC;F crisis:SG;F.
'The economy is in a crisis.'

Even though the patients (the boat and the economy) in (6.46) are inanimate objects, they refer by extension to animate objects. Thus, it can be argued that it is not the boat (6.46a) that is in distress, but the people on it, and that it is not the economy that is in a crises, but rather the people who are affected by the economic downturn.

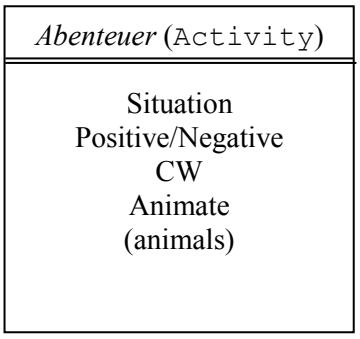
Another issue with the event-frame in the previous example is that it is possible that the unintentional situation is not negative, but rather neutral or even positive. I argued that the construction restricts the NP^{tgt} slot to a negative situation. However, such a restriction leads to under-generation of SVCs with *geraten* indicating an unintentional change in situation. Consider the following examples.

(6.47) a. Bettina geriet in ein Abenteuer.
bettina got:3SG;PST in:PRPE a:ARI;ACC;N adventure:SG;N.
'Bettina ended up in an adventure.'
b. ?Der Soldat geriet in Freiheit.
the[ARD.SG.M] soldier:SG;M got:3SG;PST in:PRPE freedom:SG;F.
'The soldier ended up free.'

c. Das Mädchen geriet wegen der
the[ARD.SG.N] girl:SG;N got:3SG;PST because of:PRPG the:ARD;SG;GEN;F
Hochzeit in Träumerei.
wedding:SG;F in:PRPE dreaming:SG;F.
'The girl started to dream because of the wedding.'

To account for sentences such as those in (6.47), the event-frame must allow for positive or neutral situations, which means that the event-frame must override the negativity restriction imposed by the SVC. The modified event-frame in Figure (6.15) is based on the NP^{tgt} *Abenteuer* ('adventure')[143] and illustrates an event-frame that allows for a positive or negative interpretation of the situation.[144]

Figure (6.15) Event-frame for NP^{tgt} *Abenteuer*



The event-frame for *Abenteuer* in Figure (6.15) allows for a positive or negative interpretation of the situation, while Figure (6.14) only allows for negative situations. Whether the SVC is interpreted as positive, for example, depends on context and world

[143] *Abenteuer* ('adventure') may be used with animals, but might be considered to be a metaphorical meaning of adventure.
[144] 'Neutral' is missing in the event-frame in Figure (6.15) since, as I argue, adventures are either positive or negative, but never neutral.

knowledge (CW). Because (6.47a) does not provide any information as to whether it is a positive or negative adventure, the event-frame must be able to account for both possible interpretations through context. Therefore, the event-frame for *Abenteuer* must able to override negativity encoded on the very abstract constructional level. In essence, event-frame restrictions always take precedence over construction (SVC) level restrictions.[145]

Since scenarios like *Abenteuer* encode a possible negative or positive situation, this brings up the question of what abstract restrictions are applicable to the target NPs. I showed that the constructional level restrictions of the NP^{tgt} encoding situation and negativity leads to under-generation of acceptable sentences by restricting target nouns to indicate both a situation and negativity (e.g. *Gefangenschaft* ('imprisonment'), *Not*

[145] An important concept is construal (see chapter 3 for my discussion of some construal operations) i.e. the framing of an event depends on "how the speaker conceptualizes the experience to be communicated, for the understanding of the hearer" (Croft & Cruse 2004: 19). Verhagen (2007) notes that it should not come as a surprise that a situation can be construed in different ways, but rather that languages offer different kinds of construal (see also Langacker (1991), Talmy (2000), Croft & Cruse (2004), and Goldberg (2006) among others). Observe the following example from Goldberg (2006: 9).

a. Liza bought a book for Zach.
b. Liza bought Zach a book.

(a) can be interpreted to mean that Liza bought a book for Zach because Zach was unable to buy it himself, while (b) can only be interpreted that Liza intended for Zach to have the book. Note that (a) can also be interpreted as Liza intending to give Zach the book. The difference between the two sentences is that (b) uses the ditransitive construction to encode the notion of transfer. Construal is also needed in the ability to make distinctions between frames of knowledge. Consider the following statement: "A speaker who accurately observes the spatial distribution of certain stars can describe them in many distinct fashions: as a constellation, as a cluster of stars, as specks of light in the sky, etc." (Langacker 1991: 61) The construal of the ordering of stars in the above example differ from each other. For example, in order to interpret the word constellation in the above statement the speaker and the hearer must share certain cultural traditions about the structure of the sky in which a particular cluster of stars is termed a constellation while no such knowledge is necessary to understand cluster (Verhagen 2007: 1). My usage of CW in the event-frame follows the view that frames of knowledge are (sometimes) crucially important in decoding sentences correctly.

('distress'), or *Armut* ('poverty')), thus limiting SVCs to an unintentional negative situation.[146]

The event-frame in its most abstract form is specific enough to capture the vast majority of situations occurring in SVCs with *geraten* encoding both situation and negativity, as shown in (6.48). Examples in (6.48) are licensed by Figure (6.5) above. The difference is that [Result$_{unint_emotion}$] is replaced by [Result$_{unint_situation}$].

(6.48) a. Der Mann geriet in Zeitmangel[tgt].
the[ARD.SG.M] man:SG;M got:3SG;PST in:PRPE timedeficiency:SG;M.
'The man is pressed for time.'

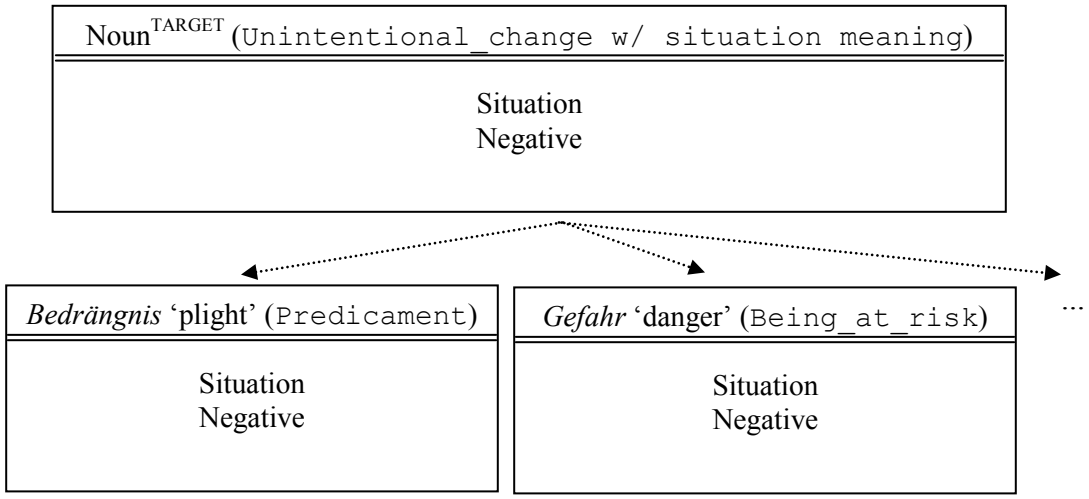
b. Die Touristin geriet in Passschwierigkeiten[tgt].
the[ARD.SG.F] tourist:SG;F got:3SG;PST in:PRPE passportdifficulties:SG;F.
'The tourist ended up with passport difficulties.'

c. Der Dieb gerät in der
the[ARD.SG.M] thief:SG;M gets:3SG in:PRPE the:ARD;SG;DAT;F
Vernehmung in die Enge[tgt].
interrogation:SG;F in:PRPE the:ARD;SG;ACC;F squeeze:SG;F.
'The thief ended up in a tight spot during the interrogation.'

The bottom row in Figure (6.16) provides two nouns exemplifying that the abstract event-frame encodes a negative situation in SVCs with *geraten*.

[146] For SVCs with *geraten* encoding an unintentional change in situation, it can be argued that this is acceptable since the great majority of these types of SVCs are negative situations (see Appendix I). However, there are instances in which SVCs with *geraten* can express an unintentional change in situation that are not interpreted as negative as shown with the case of *Abenteuer* (see example (6.47)).

Figure (6.16) Sub-classification of situation target-NPs



All target nouns listed in Figure (6.16) can be used to express an unintentional change in situation, since the event-frames encode situation and negativity. The event-frame as given in Figure (6.16), however, only allows for a negative interpretation of the situation. It is not possible to arrive at a positive interpretation of the situation without context or world knowledge. For example, *Gefahr* evokes the `Being_at_risk` frame when used outside of an SVC; however, in SVCs with *geraten*, *Gefahr* evokes the `Unintentional_being_at_risk` frame.[147] Follow the event-frame as indicated in Figure (6.16), the only possible interpretation of *Gefahr* in SVCs is that of a negative situation. There are no possible contexts, that I am aware of, in which *Gefahr* could be construed as a positive situation. Thus, the abstract level event-frame as given in Figure (6.16) is sufficient. It is necessary that the event-frame of nouns include an entry that

[147] See my discussion of frame-to-frame relations in Chapter 3.2.2.

points to context and world knowledge in order to arrive at appropriate interpretations of the SVCs, if they are used to express situations that are different from the default interpretation.[148]

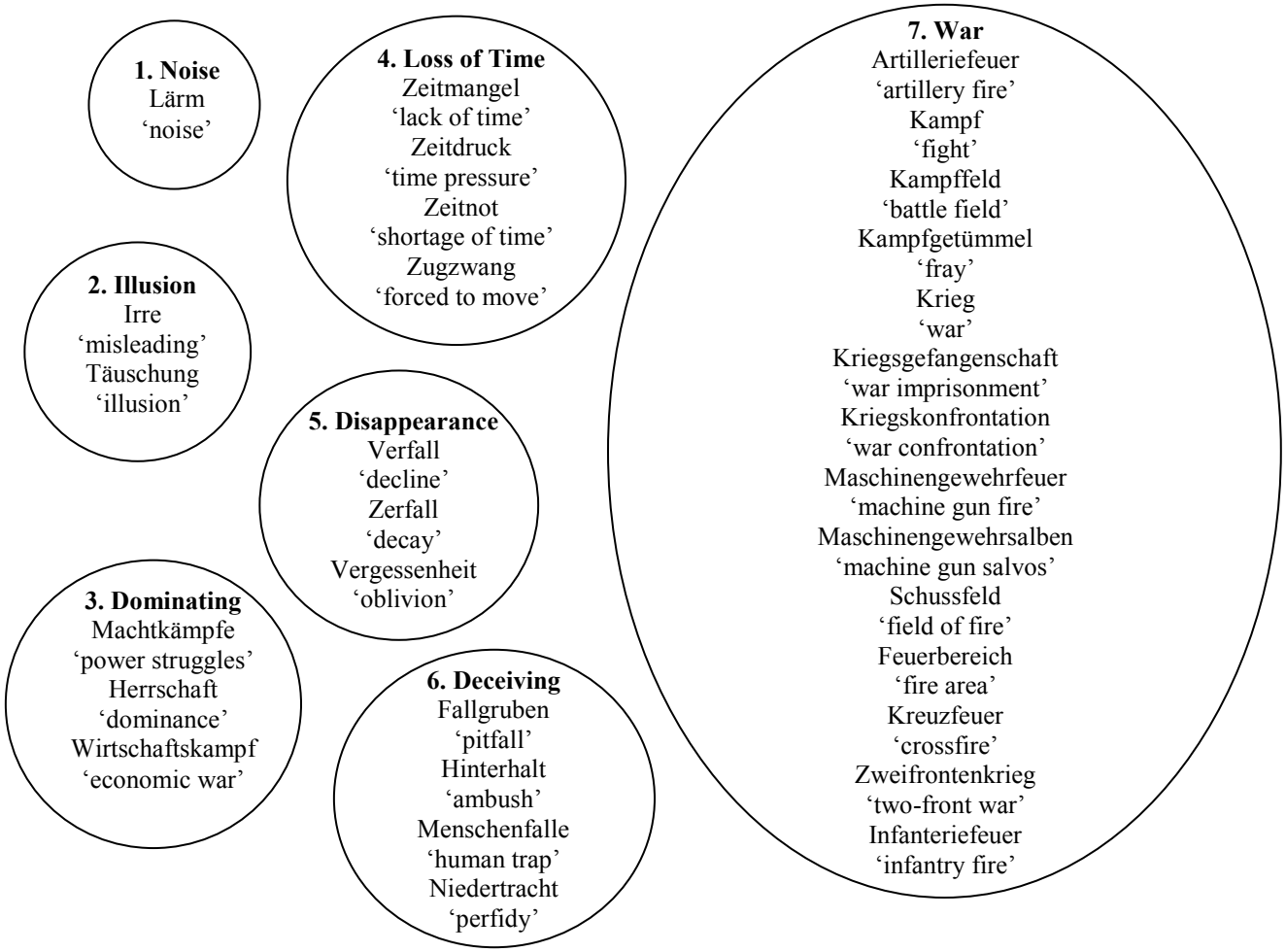
6.6.1.1 General semantic islands of nouns indicating a situation

In earlier sections, I discussed the situation nouns *Bedrängnis* and *Abenteuer*, and I showed that substitutes for *Bedrängnis* can be classified into semantic islands. Similarly, it is possible to create semantic islands for all nouns in SVCs with *geraten* that indicate a situation, as Figure (6.17) shows.[149]

[148] I regard a negative situation as the default interpretation because the majority of SVCs with *geraten* with situation nouns encode a negative situation. For example, the SVC *Max gerät in ein Abenteur* ('Max is having an adventure') would be interpreted as a negative adventure barring any other contextual information or world knowledge.

[149] This is only an excerpt from the possible semantic islands. For a full list, see Appendix J.

Figure (6.17) Semantic islands of situation NPs[tgt].



The nouns forming the semantic islands in Figure (6.17) are taken from example sentences in the DWDS. All the nouns occurring in the semantic islands have a negative connotation when used in SVCs with *geraten*, which lends credence to the previous stipulation that negativity and situation are encoded at the constructional level and that the event-frame must override the negativity restriction in order to arrive at any other

interpretation of the SVCs. In a previous section, I argued that at the abstract level the event-frame contains two entries: one for situation and the other for negativity. Such an event-frame allows for the correct interpretation of the SVC in the majority of cases. However, if the interpretation of the SVC is to be different, then the event-frame of the target noun must indicate this by adding further possibilities for interpretation, as shown in the case of *Abenteuer* (‘adventure’).

6.6.1.2 Productivity continuum of situation nouns

Previously, I argued that target nouns that allow for more substitutions have a less restrictive event-frame. In this section, I explore the productivity of target nouns in unintentional change of situation SVCs with *geraten*.

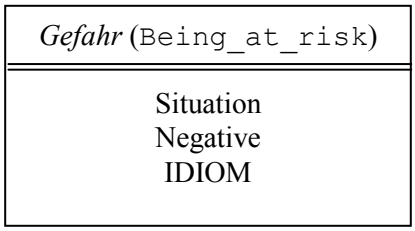
Some SVCs with *geraten* encode situations that have a highly restricted event-frame. Consider the following sentences.

(6.49) a. Der Mann gerät in Gefahr.
the[ARD.SG.M] man:SG;M gets:3SG in:PRPE danger:SG;F.
‘The man gets into a dangerous situation.’
b. Der Mann gerät in Unsicherheit.
the[ARD.SG.M] man:SG;M gets:3SG in:PRPE insecurity:SG;F.
‘The man becomes insecure.’

Duden lists *Unsicherheit* (‘insecurity’) as a (near-) synonym for *Gefahr* (‘danger’) and even though they both encode some form of negative situation, they do not express the same meaning. The difference between *Gefahr* (‘danger’) and *Unsicherheit* (‘insecurity’)

is that *Gefahr* (‘danger’) refers to an external entity that is potentially dangerous for the patient, while *Unsicherheit* is an internal feeling that some situation is potentially dangerous, harmful, or has a negative effect on oneself. Since *Gefahr* (‘danger’) and *Unsicherheit* (‘insecurity’) encode different situations, it is reasonable to argue that *Unsicherheit* is not able to replace *Gefahr* with only minimal loss of meaning equivalence. In fact, *Gefahr* represents an idiomatic SVC (no noun substitutes available) and has an event-frame, given in Figure (6.18), which lists situation, negative, and idiom (i.e. *Gefahr* does not allowing for any substitution in the SVC).

Figure (6.18) Event-frame for *Gefahr* (‘danger’)



Building upon the argument laid out in Section 6.3.4 regarding ‘productivity’, I propose that nouns in SVCs with *geraten* encoding situations form a continuum (illustrated in Figure (6.19)) that ranges from frozen SVCs to more productive SVCs according to the number of noun replacements occurring in the NP target slot. For example, the first dot on the left in the continuum in Figure (6.19) lists some examples of frozen (idiomatic) SVCs with situation target nouns (see Appendix K.1a - K.1i). Nouns listed under the second dot, like *Abhängigkeit* (‘addiction’) or *Gefangenschaft* (‘imprisonment’), have one possible substitute noun (see Appendix K.2), while *Armut* (‘poverty’) and *Verfall*

('decline') have three and four, respectively (Appendix K.3a and K.4a). Finally, the productive SVC *in Bedrängnis geraten* ('getting into a plight') allows six nouns to be used as substitutes (see Appendix K.5a).

Figure (6.19) Continuum of SVCs with *geraten* encoding situation[150]

Frozen			more Productive
Gefahr (0) ('danger')	Abhängigkeit (1) ('addiction')	Armut (3) ('poverty')	Bedrängnis (6) ('plight')
Isolierung (0) ('isolation')	Verdacht (1) ('suspicion')	Elend (2) ('misery')	
Schulden (0) ('debt(s)')	Gefangenschaft (1) ('imprisonment')	Verfall (4) ('decline')	

When comparing the continuum in Figure (6.11) to the one in Figure (6.19), some similarities and differences become apparent. SVCs with *geraten* encoding emotion and those encoding situation contain nouns whose selectional restrictions list them as idioms, thus prohibiting noun substitution. Both types also have nouns that fall on the continuum from frozen (e.g. *Grübeln* ('pondering') in Figure (6.11) or *Gefahr* ('danger') in Figure (6.19)) to very productive (*Erregung* ('ecstasy') in Figure (6.11) and *Bedrängnis* ('plight') in Figure (6.19)). Despite these similarities, there are differences between SVCs with *geraten* encoding emotion and those encoding situation. First, while the continuum of SVCs encoding an unintentional change in emotion lists one idiomatic SVC (frozen), the continuum of SVCs encoding an unintentional change in situation contains nine

[150] For a full list of substitutes, see Appendix K.

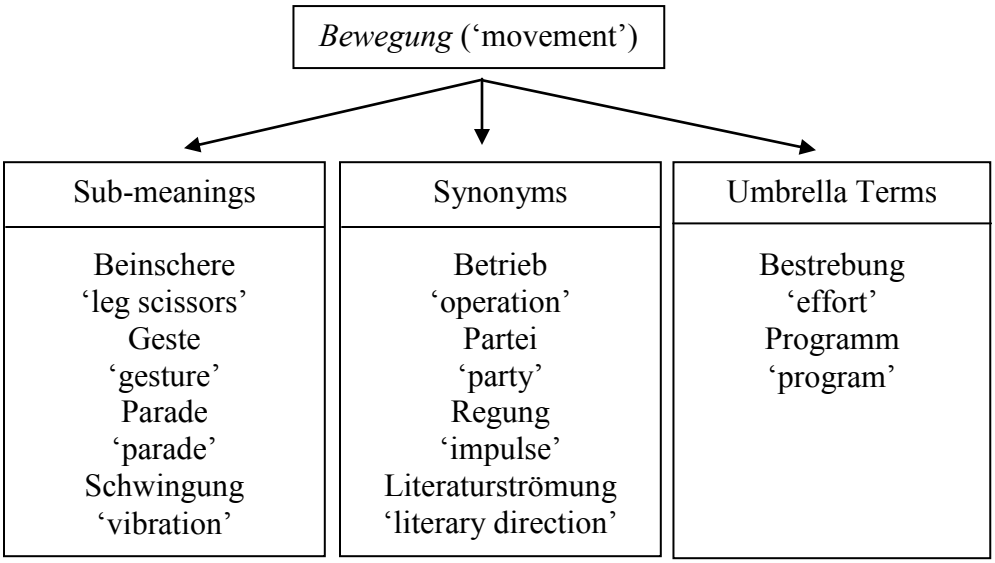
frozen SVCs (see Appendix H.1 and L.1). Second, the roles are somewhat reversed with respect to productive SVCs target nouns in SVCs indicating an unintentional change in situation have more nouns allowing for noun substitutes while SVCs with situation target nouns have only *Bedrängnis* ('plight').

6.6.2 Analysis and proposal for SVC *in Bewegung geraten*

This section discusses selectional restrictions of onset nouns with a specific focus on *Bewegung* ('motion'), including selectional restrictions in the event-frame. Figure (6.20) shows the sub-meanings, synonyms, and umbrella terms given for *Bewegung* ('movement') as collected from several synonymy dictionaries.[151] If it is possible to generalize selectional restrictions for *Bewegung*, then a careful investigation of the similarities and differences of these nouns should reveal the general restrictions that can be set into the event-frame for *Bewegung*.

[151] For a full list of (near-) synonyms of *Bewegung* please see Appendix L.

Figure (6.20) Excerpt of nouns listed as meaning equivalent of *Bewegung* (‘motion’).



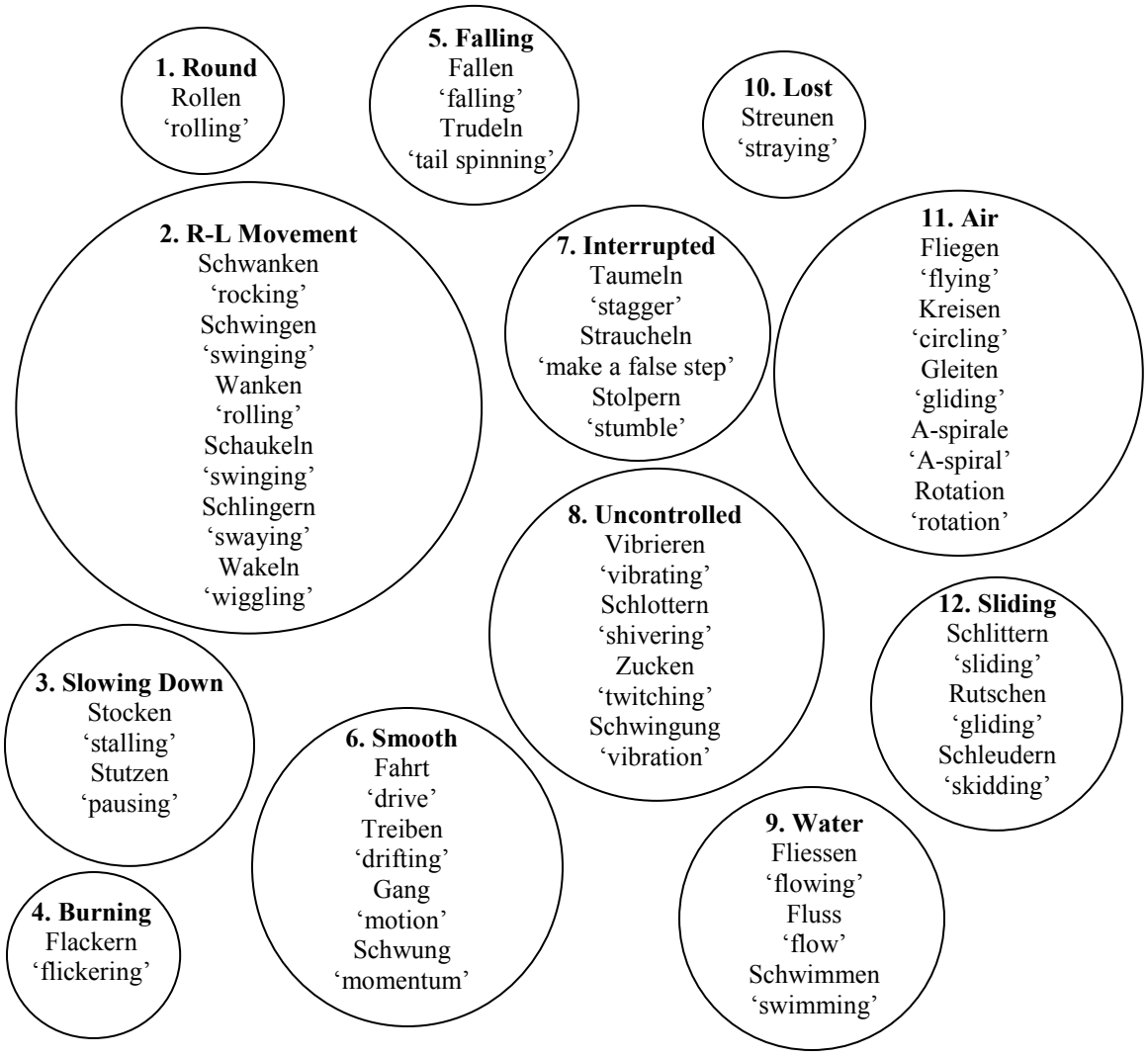
(6.50) a. Der Motor gerät in Betrieb.
the[ARD.SG.M] motor:SG;M gets:3SG in:PRPE operation:SG;F.
‘The motor starts to work.’
b. #Der Student gerät in Geste.
the[ARD.SG.M] student:SG;M gets:3SG in:PRPE gesture:SG;F.
#‘The student gets in gesture.’

The sentences in (6.50) suggest that even though *Bewegung* has many sub-meanings, synonyms, and umbrella terms, not all nouns can be inserted in the NP^{tgt} slot, as indicated by the semantic unacceptability of (6.50b). Acceptable noun replacements must be able to replace *Bewegung* in the NP^{tgt} slot with minimal loss of meaning. Using *Bewegung* as the target NP, the following pattern is created: [[NP] [NP] [*in Bewegung geraten*]]. This pattern over-generates sentences because the only restriction imposed thus far is that the substitute noun be a noun of motion. To eliminate semantically unacceptable sentences, it

is therefore necessary to specify detailed selectional restrictions in the event-frame of the noun.

Including only acceptable replacement nouns for *Bewegung*, the following semantic islands can be created that capture the similarities in meaning of each substitute noun.

Figure (6.21) Semantic islands for nouns of *Bewegung*



Consider, for example, the R-L Movement semantic island (Island No. 2) in Figure (6.21). Each noun in this island indicates an uncontrolled, non-linear motion. However, nouns do not necessarily belong to only one semantic island. For example, *Schleudern* ('skidding') is listed in the Sliding semantic islands, even though *Schleudern* generally involves some motion from one side to another.

The SVC with *in Bewegung geraten* ('starting to motion') is one of the most productive SVCs with *geraten* in terms of noun substitution possibilities. A general observation is that nouns that can to be selected as substitutes for *Bewegung* ('motion') encode a more specific type of *Bewegung*, i.e. they are more specific instantiations of motion. Nevertheless, there are several restrictions that are imposed by the event-frame. Consider the following sentences.

(6.51) a. Der Stein geriet in-s
the[ARD.SG.M] stone:SG;M got:3SG;PST in:PRPE-the:ARD;SG;ACC;N
Rollen.
rolling:SG;N.
'The stone started to roll.'

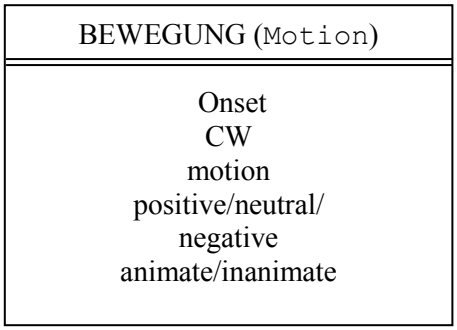
b. Alex geriet in Leipzig in eine
Alex got:3SG;PST in:PRPE Leipzig in:PRPE a:ARI;SG;ACC;F
[Freiheits]bewegung.
freedom movement:SG;F.
'Alex ended up in a movement for freedom in Leipzig.'

c. Alex geriet in Leipzig in Bewegung.
Alex got:3SG;PST in:PRPE Leipzig in:PRPE movement:SG;F.
'Alex became agitated/started to move in Leipzig.'

[Freiheits]bewegung ('[freedom]-movement') in (6.51b), for example, is not an acceptable substitute for *Bewegung* as used in the SVCs with *in Bewegung geraten*. The

reason is that *Bewegung* is polysomous and has a motion reading, encodes the meaning of a demonstration/political movement, and emotion (e.g. agitation). While (6.51b) is semantically and syntactically acceptable, the meaning of *Bewegung* in (6.51b) is that of a demonstration or political movement and not motion, i.e. *Freiheitsbewegung* encodes the gathering of people demonstrating for or advocating the right for freedom and not that freedom starts to move. Furthermore, the addition of the indefinite article *eine* ('a') in (6.51b) shifts the meaning of *Bewegung* from the motion meaning to the demonstration meaning. Lacking contextual cues, *Bewegung*, when used with animate entities, can also encode emotion and motion at the same time as in (6.51c). The limitations imposed by the event-frame are given in the following examples.

Figure (6.22) Event-frame for NP^{tgt} *Bewegung*



(6.52) a. Das Auto gerät in-s
the[ARD.SG.M] car:SG;M gets:3SG in:PRPE-the:ARD;SG;ACC;N
Stocken.
stalling:SG:N.
'The car started to stall.'

b. Die Brücke geriet in Schwingung.
The[ARD.SG.F] bridge:SG;F got:3SG;PST in:PRPE swinging:SG;N.
'The bridge started to swing.'

c. #Die Reporterin geriet in Rührung.
the[ARD.SG.F] reporter:SG;F got:3SG;PST in:PRPE emotion:SG;F.
'The reporter started to get emotional.'

Example (6.52) shows the restrictions that are imposed on SVCs with *geraten* that have *Bewegung* as the target noun. While (6.52a) and (6.52b) are semantically and syntactically compatible with the SVC, (6.52c) is not. (6.52c) does not encode the motion sense of *Bewegung*, but the emotional meaning of *Bewegung*, which excludes (6.52c) on grounds that it does not encode an onset, but rather an emotion.

An event-frame that includes only 'onset' as a restriction is only applicable at the most abstract level, since it allows the generation of unacceptable sentences such as in (6.53). Including more restrictions at this level does not prevent the generation of unacceptable sentences, instead it inhibits the production of acceptable ones.

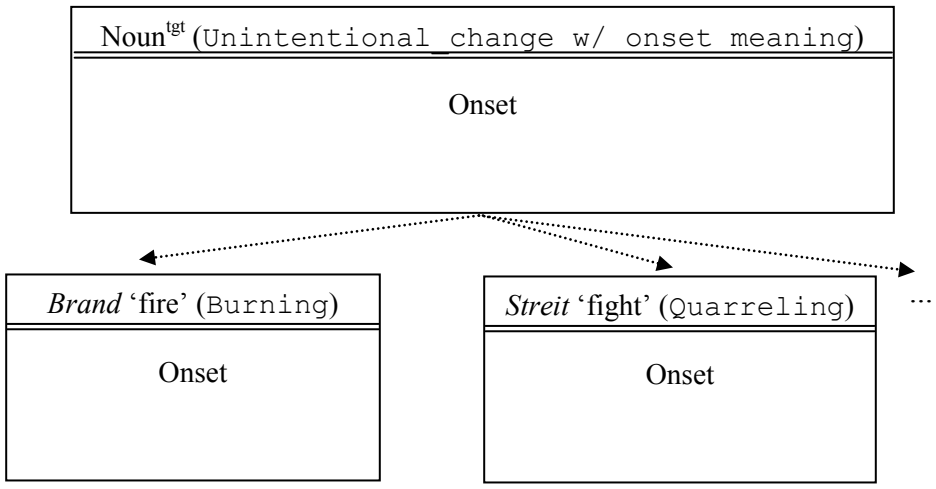
(6.53) a. *Die Kerze geriet in-s
the[ARD.SG.F] candle:SG;F got:3SG in:PRPE-the:ARD;SG;ACC;N
Flackern^{tgt}.
flickering:SG;N.
'The candle started to flicker.'

b. *Das Kind geriet in Erschöpfung^{tgt}.
the[ARD.SG.N] child:SG;N got:3SG in:PRPE exhaustion:SG;F.
'The child started to get exhausted.'

c. *Der Dieb gerät in-s Rennen^{tgt}.
the[ARD.SG.M] thief:SG;M got:3SG in:PRPE-the:ARD;SG;ACC;N running:SG;N.
'The thief started to run.'

The event-frame shown in Figure (6.23) indicates that the noun must only encode an onset in order to be acceptable in SVCs with *geraten*.

Figure (6.23) Sub-classification of Onset target-NPs



Having event-frames as listed in Figure (6.23) allows only for the generation of SVCs with the unintentional onset reading; they are not specific enough to disallow semantically unacceptable sentences. Observe the sentence below.

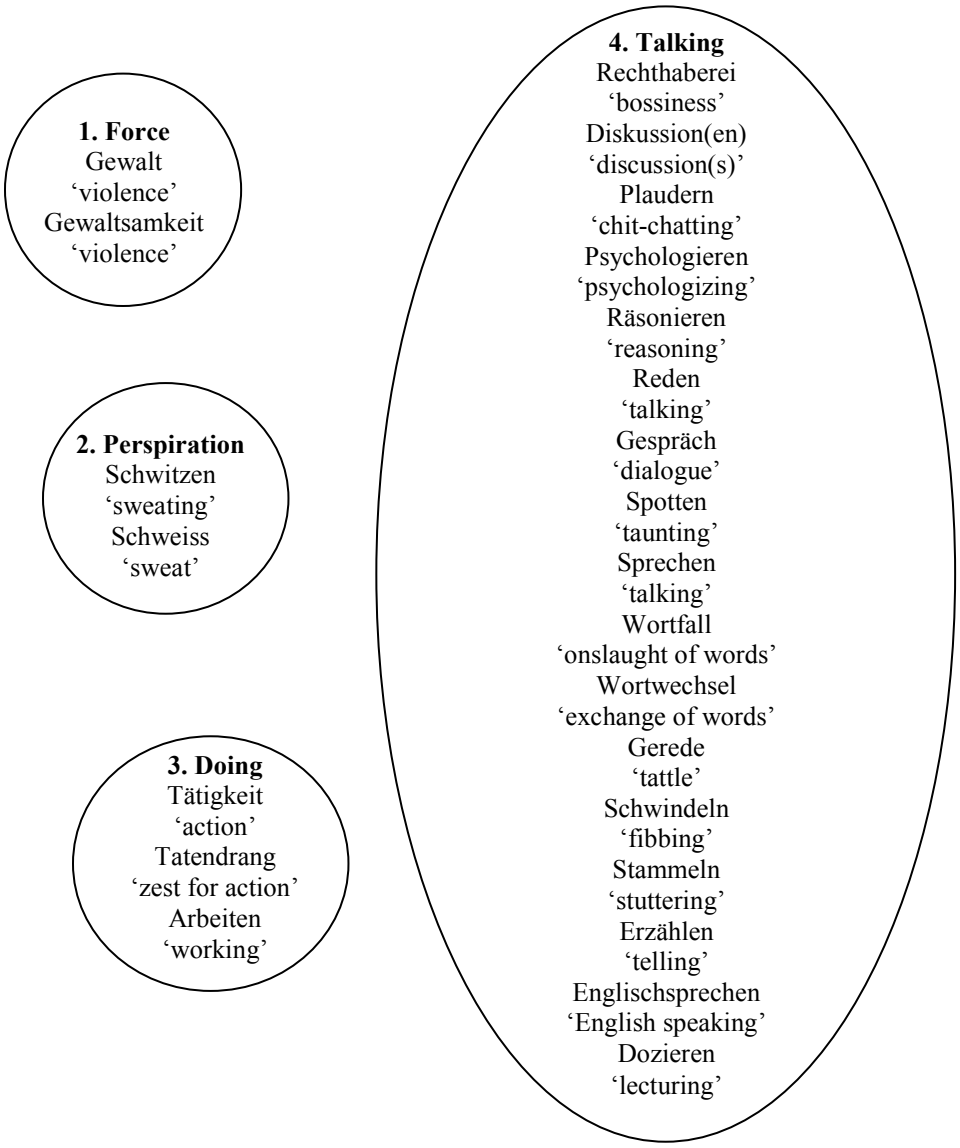
(6.54) #Der Wagen geriet in Streit.
#the[ARD.SG.M] car:SG;M got:3SP;PST in:PRPE fight:SG;M.
#'The car got into a fight.'

Example (6.54) fulfills the requirements that the target noun encodes an onset and the pattern follows the restrictions outlined in Figure (6.23). Even though both the pattern and the default event-frame requirements are satisfied, sentence (6.54) is unacceptable on semantic grounds, because an inanimate object cannot get into a fight. In the next section, I show how target nouns at the abstract level can also be clustered into semantic islands.

6.6.2.1 General semantic islands of nouns indicating an onset

It is possible to create semantic islands for nouns in SVCs with *geraten* encoding an onset, as shown below.[152]

Figure (6.24) Semantic islands of onset NPs[tgt]



[152] The islands here are only an excerpt. For a full list of semantic islands of nouns indicating an onset, see Appendix M.

Nouns in SVCs with *geraten* encoding an unintentional change with onset meaning can encode a negative, positive, or neutral onset. Depending on the context, some nouns can even encode more than one type of onset. For example, *Schwitzen* ('sweating') can take on a neutral or negative interpretation, depending on the context. The following sentence is without any context.

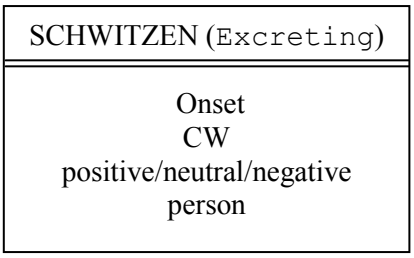
(6.55) Der Mann gerät in-s Schwitzen!
the[ARD.SG.M] man:SG;M gets:3SG in:PRPE-the:ARD;SG;ACC;N sweating:SG;N.
'The man starts to sweat!'

If someone were to overhear this sentence without context it is difficult to imagine that they would interpret it correctly, since there is no indication why the man in the sentence is sweating. The availability of context clues and/or world knowledge becomes crucially important for interpreting the sentence in (6.55) correctly. Let us assume that the person overhearing (6.55) happens to walk by a police station. It is reasonable to assume that the man starting to sweat is being interrogated and that he is about to be confronted with evidence of his guilt. Similarly, the utterance is perfectly interpretable if the person overhearing it is walking by a gym where a man is working out and his friend/trainer says the sentence in (6.55) because the man is having a great workout.[153] The event-frame for *Schwitzen* would include a negative/positive/neutral restriction that allows for contextual interpretation to generate the correct meaning. In this instance, context and world

[153] It is understood that other scenarios are also able to provide the necessary context and/or world knowledge.

knowledge (CW) become crucially important for the correct interpretation. The (potential) event-frame for *Schwitzen* is given in Figure (6.25).

Figure (6.25) Event-frame for *Schwitzen* (‘sweating’)



The *Schwitzen* (‘sweating’) event-frame consists of four parts. The first part indicates that the target noun must encode an unintentional change with onset meaning. The second is context and world knowledge (CW), which is crucially necessary to correctly decode the sentence in Figure (6.25). The entry positive/neutral/negative provides the necessary freedom for ‘CW’ to interpret the sentence correctly. If, for example, the event-frame for *Schwitzen* only had the negative entry, then only the interpretation of the person sitting in an interrogation room would be possible. Finally, the last entry indicates that *Schwitzen* can only be used felicitously with people (e.g. **Der Hund geriet ins Schwitzen*. (*‘The dog started to sweat.’)) In essence, the event-frame is able to add further possibilities for interpretation.

6.6.2.2 Productivity continuum of onset nouns

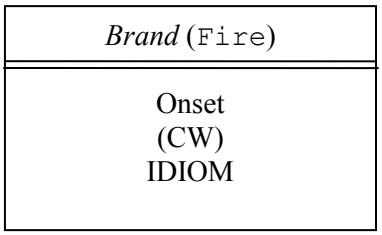
Target NPs can be placed on a continuum that indicates their level of productivity. For example, *in Brand geraten* ('starting to burn') is an idiomatic SVC because the target noun *Brand* ('fire') cannot be replaced by a synonym. This in turn means that *Brand* ('fire') is not productive. Consider the following examples.

(6.56) a. Das Haus geriet in Brand.
the[ARD.SG.N] house:SG;N got:3SG;PST in:PRPE fire:SG;M.
'The house caught fire.'

b. #Das Haus geriet ins
the[ARD.SG.N] house:SG;N got:3SG;PST in:PRPE-the:ARD;SG;ACC;N
Feuer.
fire:SG;M
'The house caught fire.'

(6.56) illustrates that it is not possible to replace *Brand* with *Feuer* and still keep the same meaning of the SVCs with *geraten*. That is, the replacement of *Brand* with *Feuer* causes a shift in interpretation from an onset meaning (6.56a) to a location meaning (6.56b). In other words, (6.56a) indicates that the house started to burn because of some event, while (6.56b) means that the house was moved into the fire. Figure (6.26) illustrates the event-frame for *Brand*.

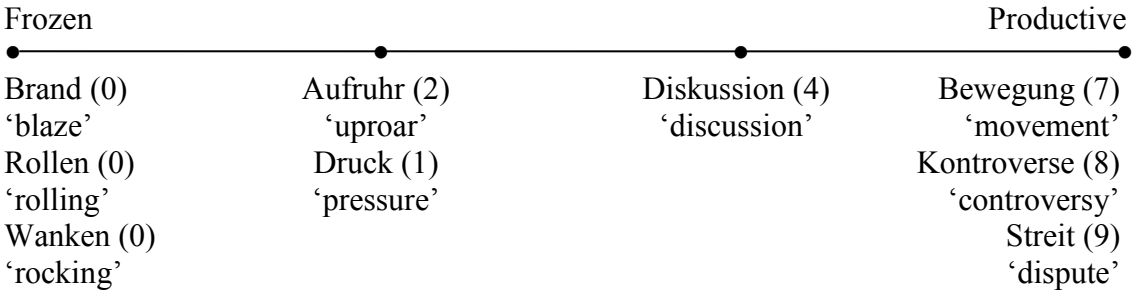
Figure (6.26) Event-frame for *Brand* (‘fire’)



The entry ‘IDIOM’ in the event-frame of *Brand* indicates that this particular SVC with *geraten* is an idiomatic SVC because there are no nouns that can replace *Brand* (‘fire’).

Like emotion and situation nouns, target nouns in SVCs with *geraten* expressing an unintentional change with onset meaning can be plotted on a continuum that indicates how many substitutions a noun allows, as shown in Figure (6.27).

Figure (6.27) Continuum of SVCs with *geraten* encoding onset[154]



Nouns listed along the continuum in Figure (6.27) have different numbers of noun substitutes available. On the far left side are idiomatic SVCs that do not allow for any substitution of the noun in the SVC and that need to be listed individually in the lexicon.

[154] For a full list of substitutes, see Appendix N.

On the other end of the continuum are highly productive nouns like *Bewegung* ('movement') with seven possible replacement nouns, or *Streit* ('dispute') with nine substitute nouns (see Appendix N.4). Between these two extremes are SVCs that allow for a limited number of nouns to take their place in SVCs. *Aufruhr* ('uproar'), for example, has *Taumel* ('reeling') and *Wallung* ('flush') as noun substitutes (Appendix N.2b). *Druck* ('pressure') (Appendix N.2a) has only one replacement noun, *Umstände* ('circumstances'), available, while *Diskussion* ('discussion') (see Appendix N.3a) is only slightly more productive with four possible substitute nouns (*Auseinandersetzung* ('conflict'), *Debatte* ('debate'), *Gespräch* ('conversation'), and *Kontrovere* ('controversy')) .

Observe that the highly productive noun *Bewegung* can have *Rollen* as a substitute. This should not come as a surprise, since *Rollen* is a more specific type of movement and thus works as a replacement for *Bewegung*. However, because *Rollen* is more specific, it does not allow *Bewegung* as a substitute. In fact, *ins Rollen geraten* ('starting to roll') is an idiomatic SVC by itself.

6.7 Conclusions

In this chapter, I showed that SVCs with *geraten* encoding an unintentional change in emotion, situation, or onset of an event have the same pattern as BVCs with *geraten* in the third central sense and that selectional restrictions must be encoded in an event-frame. I provided an analysis that shows that constructional level restrictions are not sufficient to prohibit the generation of unacceptable sentences and argued that selectional restrictions

in the event-frame are able to restrict NP^{tgt} substitution to allow semantically acceptable sentences. I also argued that at an abstract level the event-frame only encodes emotion, which would lead to over-production of SVCs with *geraten* encoding emotion. Thus, it is necessary to specify event-frame restrictions for every noun in order to properly identify nouns that could be possible substitutes. Possible replacement nouns can be incorporated by semantic islands, both at the concrete level and the abstract level.

With regard to target nouns in the situation sub-meaning of SVCs with *geraten*, I argued that negative situations are part of constructional level restrictions which means the construction only allows for the substitution of nouns that encode negativity and situation. However, I showed that there are SVCs with *geraten* in the situation sub-meaning that can be interpreted as positive or at least neutral (cf. *Abenteuer* (‘adventure’)), which led me to argue that these types of nouns encode positive and/or neutrality in the event-frame and that the event-frame is capable of overriding the restrictions imposed by the construction. For this to occur, the context (and/or world knowledge) must contain enough information to allow a positive or neutral interpretation of the situation. If the context does not provide enough information, the sentence will be interpreted as a negative situation or deemed semantically odd. Furthermore, context is crucially important in determining whether an event is, for example, a violent or non-violent conflict. This information is not provided by the construction itself, but is embedded in the context and is indicated by ‘CW’ in the event-frame. The discussion presented here shows that it is difficult to predict which nouns are allowed as substitutes for target nouns in SVCs. Additionally, the interpretation of SVCs with *geraten* encoding

an unintentional change in situation is simpler than with SVCs with emotion target nouns, because the default reading of SVCs with situation nouns is negative and only the event-frame of the target noun can override this interpretation, as I have demonstrated with *Abenteuer*.

I also showed that SVCs with *geraten* encoding an unintentional change in onset of an event have three potential interpretations depending on context. First, the noun can encode a negative onset like *Gewalttätigkeit* ('violence') in which the patient unintentionally starts to act violently towards a person, animal, or thing. Second, nouns can be interpreted as having a neutral reading as is the case with nouns such as *Schaukeln* ('swinging'), *Traumzustand* ('state of dreaming'), or *unter Bekannte* ('among acquaintances'). Finally, nouns like *Liebesbeziehung* ('love relationship') can be interpreted as a positive onset. It is, however, important to recognize that depending on context, nouns that are prototypically regarded as encoding, for example, a positive onset (i.e. *Liebesbeziehung*) can take on a negative reading if the patient ultimately comes to harm. Therefore, no restrictions that the NP^{tgt} must be negative, positive, or neutral are posited at the constructional level since this would restrict the production of novel sentences to either a negative, positive, or neutral onset event. For this reason, the event-frame must include restrictions regarding the result (negative, positive, neutral) and also with respect to context and world knowledge as is the case with *Schwindeln*, where malicious intent is disallowed from forming an SVC with *geraten*.

I argued that emotion, situation, and onset nouns can be placed on a continuum from frozen to productive, and that nouns in SVCs with *geraten* expressing an

unintentional change in emotion form productivity clusters (as is true for the other two subtypes). That is, nouns form clusters with other nouns that have a similar number of possible substitutes. For example, *Grübeln*, which does not have any possible replacements, is listed as an idiomatic SVC and must be lexicalized. In the case of *Erregung*, which has many possible substitutes, the SVC can be used productively in that novel expressions are more likely to be allowed by substitution for *Erregung* than with the other nouns listed. Finally, the discussion presented here shows that it is only possible to say that an emotion noun must fill the NP^{tgt} slot, but it is not possible to systematically predict which emotion noun is allowed to act as a substitute. Selectional restrictions in event-frames may also not always be able to clearly restrict noun substitution because the restrictions listed are not absolute. This means that defining precise selectional restrictions in the event-frame of nouns in SVC is very difficult. In addition, some SVCs like *ins Grübeln geraten* appear to be fixed and can be listed in the lexicon, while other SVCs with *geraten* seem to allow a great number of nouns that can be replaced for the target noun. These SVCs exhibit a tendency to be more productive.

In comparing all three types of SVCs with *geraten*, several similarities can be observed. First, all three SVC types have in common that it is not possible to systematically predict which noun is able to replace a target noun. Second, the event-frame of target nouns must be specified on a case by case basis. Finally, for some SVCs with *geraten*, context and world knowledge plays a crucial role in interpreting the meaning of the SVC correctly.

Chapter 7

Conclusions

This dissertation has been concerned with the analysis of support verb constructions with *geraten* in German. I set out to determine the selectional restrictions of target nouns and to find an answer to the question of whether it is possible to systematically predict which nouns are able to participate in support verb constructions.

In Chapter 2, I discussed several aspects of SVCs in German (e.g. referentiality, morpho-syntactic flexibility, etc.) as analyzed and described in previous research. The focus of previous research has mainly been on the function of the SV in SVCs and how SVCs are similar to and different from idioms and other multi-word expressions and not on the selectional restrictions of nouns in SVCs. My discussion showed that previous research has contributed a great deal of understanding into the workings of SVCs, especially the contribution of the support verb to the meaning of the SVCs. For example, Winhart (2002) showed that the support verb is not semantically empty (as previously assumed), but instead contributes specific semantic and syntactic elements to the SVC.

In Chapter 3, I looked at Frame Semantics and its implementation in FrameNet. I argued that by adapting the modified frame semantic approach proposed by Boas (2003), event-based frame semantics, it is possible to posit selectional restrictions imposed by the target noun on the NP^{tgt} slot in SVCs with *geraten*. Specifically, I argued that the event-frame is able to capture the necessary restrictions so that unacceptable sentences are ruled

out and that contextual and world knowledge, which are crucially important for the correct interpretation of some SVCs, must be listed in the event-frame.

In Chapter 4, I provided an explanation that shows that *geraten* as a support verb is an extension of the third central sense of the full verb *geraten*. The third central sense of *geraten* and *geraten* as SV have both similarities and differences. First, *geraten* as both base verb (third central sense) and support verb indicates unintentionality on part of the patient (e.g. *Dagmar geriet aufs Eis* ('Dagmar ended up on the ice.')) Second, while *geraten* as base verb is the frame-evoking LU, the frame-evoking element in SVCs with *geraten* is the noun. That is, the target shifts from the verb to the noun in SVCs. Finally, the support verb *geraten* contributes unintentionality to the SVC, but not motion towards a location. I argued that *geraten* in its third central meaning is an LU evoking the `Unintentional_motion` frame that is created by the fusion of the `Motion` and the `Unintentional_act` frames. I also showed that construction level restrictions are not sufficient to prevent the creation of unacceptable sentences because the constructions themselves are too powerful and thus must be restricted through the event-frame. I proposed to restrict the integration nouns into the construction by employing a modified event-based frame-semantic approach in which event-frames restrict the participation of target nouns in SVCs with *geraten*.

In Chapter 5, I demonstrated that it is possible to distinguish among three different meanings of SVCs with *geraten* (emotion, situation, and onset), and that each sub-meaning can be described in terms of characteristics specific to each sub-meaning. Furthermore, I argued that there is a difference in meaning and communicative function

between the third central sense of *geraten*, SVCs with *geraten*, and passive paraphrases of SVCs with *geraten* in that each construction provides a different focus and perspective to/of an event as, for example, the beginning of an event is only highlighted in SVCs with *geraten*. My analysis shows that paraphrases fail to capture the meaning conveyed by SVCs with *geraten*. SVCs fulfill a specific communicative function (cf. von Polenz 1963) that cannot be captured by BVCs or passive paraphrases with the same simplicity.

In Chapter 6, I provided a detailed analysis of the three extended senses of *geraten*. I showed that constructional restrictions are not enough to limit which nouns can replace an existing noun. I proposed an event-frame for *Angst* that was able to restrict the creation of unacceptable sentences in SVCs with *geraten*. I also showed that the nouns that are allowed by the selectional restrictions can be categorized into semantic islands both on the concrete level as well as the abstract level. In addition, I argued that idiomatic SVCs, SVCs that do not allow noun substitution, are listed in the lexicon. Finally, I showed that noun substitutes fall on a continuum of expressions from frozen to (more) productive. I also argued that it is not possible to predict exactly where the nouns will land (with the exception of idiomatic SVCs), since selectional restrictions must be encoded in the event-frame of each noun individually. In addition, there is a marked difference in levels of productivity between nouns in each of the three sub-meanings. My investigation showed that SVCs with *geraten* indicating an unintentional onset have many more idiomatic SVCs than the other two sub-meanings.

There are several suggestions for future research that might shed some light on SVCs in German that I have not been able to explore in this thesis. The first suggestion is

to expand the investigation to also include support verbs such as *bringen* ('to bring'), *kommen* ('to come'), *fallen* ('to fall') just to name a few, in order to see whether or not the approach I suggested here by positing selectional restrictions in event-frames is able to restrict the selection of unacceptable nouns in SVCs with other nouns. Recall that it is the noun that selects the support verb and not the reverse (cf. Ruppenhofer et al. 2010).

A second suggestion is to investigate German and English support verbs contrastively and to other languages in order to see what the differences and similarities are between languages and perhaps arrive at a unifying account of SVCs.

A third suggestion for future research would be concerned with the semantic distance of synonyms, which would include an in-depth analysis of the similarities and differences of the nouns in semantic islands. In addition, it is necessary to specify the factors that lead to lexicalization or semi-productivity in more detail using more support verbs and across languages, as showed by my investigation that not all SVCs can be lexicalized nor that all can be generated by rule.

Finally, it is necessary to investigate whether there is an SVC construction similar to the ditransitive construction proposed by Goldberg (1995). In addition, this research could be combined with an investigation into the connection between SV and noun regarding communicative function, i.e. the ability of nouns to participate in SVCs and what the contribution of nouns is to the communicative function of SVCs on the event perspective. The ultimate goal should be to investigate all aspects of SVCs in order to gain a full understanding of how SVCs work in different languages.

Appendix A

A.1 List of the first 500 entries in the corpus of SVCs.

SVGID	REF	PREP	DEF	INDEF	XFACT	NOUN	VERB	POSTP
1		zum				Abschluss	bringen	
2		in				Auftrag	geben	
3		zum				Abschluss	kommen	
4		zum				Abschluss	gelangen	
5		zur				Abstimmung	kommen	
6		unter				Abhaengigkeit	geraten	
7		in				Abhaengigkeit	befinden	
8		in				Abhaengigkeit	bleiben	
9		in				Abhaengigkeit	geraten	
10		in				Abrede	stellen	
11		0	die	eine		Abmachung	treffen	
12		0				Abschied	nehmen	
13		0				Abstand	nehmen	
14		in				Abzug	bringen	
15		zum				Abzug	kommen	
16		zum				Abdruck	kommen	
17		0				Achtung	geniessen	
18		ausser				Acht	lassen	
19		im				Angebot	sein	
20		zum				Angebot	kommen	
21		zu				Ansehen	kommen	
22		zu				Ansehen	gelangen	
23		in				Ansehen	stehen	
24		in				Angst	halten	
25		0				Angst	haben	(vor)
26		in				Angst	geraten	
27		in				Angst	versetzen	
28		in				Angst	ausbrechen	
29		in				Angst	leben	
30		in				Angst	schweben	
31		in				Angst	sein	
32		unter				Anweisung	stehen	
33		zum				Ausdruck	bringen	
34		0				Ausdruck	geben	
35		0				Ausdruck	finden	
36		zum				Ausdruck	kommen	
37		zum				Ausdruck	gelangen	
38		0				Ausschau	halten	
39		0	die	eine		Auswirkung	haben	(auf)

40	zur			Auffuehrung	bringen		
41	0			Anerkennung	geniessen		
42	0			Anerkennung	finden		
43	zur			Anwendung	bringen		
44	in			Anwendung	bringen		
45	0			Anwendung	finden		
46	0			Ausschlag	geben		
47	in			Besitz	nehmen		
48	in			Besitz	haben		
49	0	?	eine	Beziehung	haben	(zu)	
50	in			Betracht	ziehen		
51	zur			Durchfuehrung	gelangen		
52	zur			Durchfuehrung	bringen		
53	zur			Durchfuehrung	kommen		
54	zur			Debatte	stellen		
55	zur			Debatte	stehen		
56	zur			Debatte	gelangen		
57	in			Fahrt	kommen		
58	in			Frage	kommen		
59	0	die	eine	Frage	stellen		
60	0	die	eine	Forderung	stellen		
61	in			Zweifel	ziehen		
62	gegen			Zweifel	erheben		
63	in			Anwendung	kommen		
64	zur			Anwendung	kommen		
65	zum			Ausbruch	kommen		
66	in			Rage	geraten		
67	in			Abhaengigkeit	sein		
68	in			Abhaengigkeit	stehen		
69	zu	?	einem	Ausgleich	gelangen		
70	in			Aussicht	stellen		
71	in			Aussicht	stehen		
72	in			Aussicht	haben		
73	in			Aussicht	nehmen		
74	in			Gefahr	laufen		
75	von			Ausschlag	sein		
76	zur			Aussprache	stehen		
77	zur			Aussprache	stellen		
78	in			Austausch	treten		
79	zur			Auswirkung	kommen		
80	zur			Auswahl	stehen		
81	zur			Auswahl	stellen		
82	zur			Aufklaerung	kommen		
83	zur			Auffuehrung	gelangen		
84	zur			Auffuehrung	kommen		
85	zu	?	einer	Auffassung	gelangen		
86	im			Aufbruch	sein		

87		im			Aufwand	sein	
88		0			Ausfuehrung	machen	
89		zur			Ausfuehrung	bringen	
90		zur			Ausfuehrung	gelangen	
91		0		(eine)	Ahnung	haben	
92		0			Anfang	nehmen	
93		0			Anfang	machen	
94	sich	in			Anwendung	befinden	
95		in			Anwendung	bleiben	
96		in			Anwendung	sein	
97		zur			Anwendung	gelangen	
98		0	die	eine	Anregung	geben	
99		0			Anregung	bekommen	
100		0			Ansprueche	stellen	
101		0			Anspruch	haben	(auf)
102		0			Anspruch	erheben	
103		in			Anspruch	nehmen	
104		zur			Anrechnung	kommen	
105		0	die	eine	Anordnung	treffen	
106		0	(den)	(einen)	Antrag	stellen	(auf)
107		0	(der)	(eine)	Antwort	geben	
108		0			Antwort	bekommen	
109		0			Antwort	erhalten	
110		0			Antwort	erteilen	
111		gegen			Anklage	erheben	
112		unter			Anklage	stellen	
113		zur			Anschauung	gelangen	
114		zur			Anschauung	kommen	
115		zur			Ansicht	kommen	
116		zur			Ansicht	gelangen	
117		0			Ansicht	sein	
118	sich	den			Anschein	geben	
119		0			Anschein	haben	
120		0			Anstoss	nehmen	
121		0			Anstoss	geben	
122		0			Angaben	machen	
123		0			Anteil	nehmen	
124		an			Anteil	haben	
125		zur			Anzeige	bringen	
126		0			Aufnahme	finden	
127		zur			Aufnahme	kommen	
128		0	den	einen	Auftrag	geben	
129		in			Auftrag	gehen	
130		in			Gang	geraten	
131		0			Auftrag	bekommen	
132		0			Auftrag	erhalten	
133		0			Auftrag	erteilen	

134		in	Auftrag	haben
135		in	Auftrag	nehmen
136		in	Auftrag	sein
137		0	Aufstellung	nehmen
138		in	Aufstellung	stehen
139		unter	Aufsicht	stehen
140		unter	Aufsicht	stellen
141		in	Aufregung	geraten
142		in	Aufregung	versetzen
143		in	Aufregung	halten
144		in	Aufregung	sein
145	sich	im	Aufbau	befinden
146		zum	Aufruf	kommen
147		in	Abhaengigkeit	kommen
148		in	Aktion	sein
149		in	Armut	geraten
150		in	Arbeit	gehen
151	sich	in	Arbeit	befinden
152		in	Arbeit	geben
153		in	Arbeit	haben
154		in	Arbeit	nehmen
155		in	Arbeit	sein
156		in	Arbeit	setzen
157		beim	Arbeiten	sein
158		unter	Arrest	stehen
159		unter	Arrest	stellen
160		unter	Arrest	sein
161		0	Andeutung	machen
162		in	Angriff	nehmen
163		0	Anstrengungen	unternehmen
164		in	Anschlag	bringen
165		in	Ansatz	bringen
166		im	Anschwellen	sein
167		in	Aufruhr	versetzen
168		in	Aufruhr	geraten
169		in	Aufruhr	halten
170		in	Aufruhr	sein
171		in	Atem	halten
172		ausser	Atem	kommen
173		ausser	Atem	sein
174		im	Bau	befinden
175		im	Bau	sein
176		0	Bad	nehmen
177		zur	Bearbeitung	bringen
178		zur	Bearbeitung	haben
179		in	Bearbeitung	kommen
180		in	Bearbeitung	nehmen

181		in			Bearbeitung	sein
182		zur			Bedingung	machen
183		in			Bewegung	kommen
184	sich	in			Bewegung	befinden
185		in			Bewegung	bleiben
186		in			Bewegung	sein
187		in			Bewegung	setzen
188		in			Bewegung	versetzen
189		in			Bewegung	bringen
190		in			Bewegung	geraten
191		in			Bewegung	haben
192		zur			Bluete	kommen
193		in			Bluete	sein
194		in			Bluete	stehen
195		ins			Brueten	verfallen
196		in			Bedraengnis	kommen
197		in			Bedraengnis	geraten
198		in			Bedraengnis	bringen
199		in			Bedraengnis	sein
200		zu			Bedenken	geben
201		ins			Bedenken	kommen
202		in			Begeisterung	geraten
203		in			Begeisterung	bringen
204		in			Begeisterung	sein
205		in			Begeisterung	versetzen
206		in			Betrieb	halten
207	sich	in			Betrieb	befinden
208		in			Betrieb	bleiben
209		in			Betrieb	nehmen
210		in			Betrieb	sein
211		ausser			Betrieb	sein
212		in			Betrieb	setzen
213		ausser			Betrieb	setzen
214		in			Betrieb	bringen
215		in			Betrieb	gehen
216		in			Betrieb	kommen
217		in			Betrieb	lassen
218		0			Beitrag	leisten
219		in			Beifall	ausbrechen
220		0	den	einen	Befehl	geben
221		0			Befehl	bekommen
222		0			Befehl	erteilen
223		unter			Beweis	stellen
224		0			Beweis	fuehren
225		unter			Beweis	stehen
226		zu			Bewusstsein	kommen
227		ins			Bewusstsein	gelangen

228	in				Beruhigung	kommen
229	0				Beschwerde	erheben
230	0				Beachtung	finden
231	in			js.	Belieben	stellen
232	unter				Beobachtung	stellen
233	0				Beobachtungen	anstellen
234	unter				Beobachtung	stehen
235	in				Benutzung	nehmen
236	0				Berechnungen	anstellen
237	in	den	?		Besitz	kommen
238	im				Besitz	sein
239	unter				Beschluss	liegen
240	unter				Beschluss	stehen
241	zur				Besinnung	kommen
242	0				Bestaetigung	erfahren
243	0				Beruecksichtigung	finden
244	in				Beruehrung	bringen
245	in				Beruehrung	kommen
246	in				Beruehrung	stehen
247	in				Betracht	kommen
248	ausser				Betracht	lassen
249	0				Beziehungen	aufnehmen
250	in				Beziehung	stehen
251	in				Beziehung	treten
252	in				Beziehung	setzen
253	in				Agitation	geraten
254	auf				Bezug	nehmen
255	0				Buergschaft	leisten
256	von				Bedeutung	sein
257	unter				Beschuss	liegen
258	0		eine		Absage	erteilen
259	unter				Beschuss	nehmen
260	in				Beschlag	nehmen
261	in				Brand	setzen
262	in				Brand	geraten
263	in				Brand	haben
264	in				Brand	stehen
265	zu				Bruch	gehen
266	im				Begriff	sein
267	im				Begriff	stehen
268	in				Besorgnis	sein
269	zu				Besuch	sein
270	zur				Beratung	stehen
271	zur				Beratung	stellen
272	in				Bereitschaft	stehen
273	von				Dauer	sein
274	in				Depressionen	verfallen

275	in			Dienst	stellen
276	im			Dienst	befinden
277	im			Dienst	stehen
278	in			Dienste	treten
279	zur			Diskussion	stellen
280	in			Diskussion	sein
281	zur			Diskussion	stehen
282	zur			Diskussion	gelangen
283	in	?	eine	Diskussion	geraten
284	in			Druck	geben
285	in			Druck	gehen
286	zum			Druck	gelangen
287	unter			Druck	geraten
288	unter			Druck	haben
289	in			Druck	sein
290	unter			Druck	setzen
291	unter			Druck	stehen
292	zum			Durchbruch	bringen
293	zur			Dahrstellung	gelangen
294	zur			Dahrstellung	kommen
295	0			Deckung	nehmen
296	ohne			Deckung	sein
297	zu			Diensten	sein
298	zu			Diensten	stehen
299	in	der	?	Defensive	sein
300	in			Duldung	stehen
301	0			Eid	leisten
302	zur			Einsicht	kommen
303	zur			Einsicht	gelangen
304	in			Einsicht	nehmen
305	zur			Einsicht	fuehren
306	im			Einsatz	sein
307	zum			Einsatz	bringen
308	zum			Einsatz	gelangen
309	zum			Einsatz	kommen
310	im			Einsatz	stehen
311	zum			Einsturz	bringen
312	0			Einzug	halten
313	0			Einfluss	ausueben
314	0			Einfluss	nehmen
315	unter	dem	?	Einfluss	stehen
316	zu			Ende	bringen
317	zu			Ende	gehen
318	zu			Ende	fuehren
319	zu			Ende	sein
320	0			Ende	haben
321	zu			Ende	kommen

322	0			Ende	nehmen
323	zu	?	einer	Entscheidung	kommen
324	zur			Entscheidung	stellen
325	zur			Entscheidung	gelangen
326	zur			Entscheidung	stehen
327	zu	?	einem	Entschluss	kommen
328	zum			Erliegen	bringen
329	0	die	eine	Erklaerung	finden
330	0			Erwaehnung	finden
331	in			Erwaegung	ziehen
332	zum			Ertragen	kommen
333	zur			Erkenntnis	kommen
334	0	die		Einwilligung	geben
335	0			Einwilligung	bekommen
336	0			Einblick	haben
337	0			Einblick	nehmen
338	0			Eindruck	machen
339	in			Erfahrung	bringen
340	0	die	eine	Erlaubnis	geben
341	0			Erlaubnis	bekommen
342	0			Erlaubnis	erteilen
343	zur			Eroerterung	stellen
344	zur			Eroerterung	stehen
345	in			Erfuellung	gehen
346	in			Erregung	geraten
347	in			Erregung	bringen
348	in			Erregung	halten
349	in			Erregung	sein
350	in			Erregung	versetzen
351	0			Ersatz	leisten
352	zum			Erstaunen	bringen
353	in			Erstaunen	geraten
354	in			Erstaunen	setzen
355	in			Erstaunen	versetzen
356	zu			Ergebnissen	gelangen
357	zum			Ergebnis	kommen
358	0			Experiment	machen
359	in			Extase	kommen
360	in			Extase	bringen
361	in			Extase	geraten
362	in			Extase	versetzen
363	in			Empfang	nehmen
364	auf			Empfang	sein
365	0			Entwicklung	nehmen
366	zur			Entfaltung	bringen
367	0			Ergaenzung	vornehmen
368	0			Erweiterung	vornehmen

369		zur			Erkenntnis	gelangen
370	sich		?	eine	Erkaeltung	zuziehen
371	sich	in	0	0	Einklang	befinden
372		im			Einklang	stehen
373		0			Einwendung	finden
374		ins			Elend	bringen
375		ins			Elend	geraten
376		ins			Elend	stuerzen
377		zum			Erfolg	fuehren
378		in			Erinnerung	haben
379		in			Erinnerung	kommen
380		im			Einverstaendnis	sein
381		im			Entstehen	sein
382		in			Erwartung	sein
383		in			Erscheinung	treten
384		zu			Fall	bringen
385		zu			Fall	kommen
386		im			Fall	sein
387		in			Fabrikation	geben
388		in			Fabrikation	gehen
389		in			Fabrikation	nehmen
390		in			Fabrikation	sein
391		in			Fahrt	kommen
392		in			Fahrt	bringen
393		in			Fahrt	sein
394		0			Faehigkeit	besitzen
395		aus	der		Fassung	bringen
396		ausser			Fassung	sein
397		in			Fluss	bringen
398		in			Fluss	kommen
399		in			Fluss	sein
400		0			Foerderung	erfahren
401		0			Foerderung	geniessen
402		in			Fuehrung	geben
403		0			Fuersorge	geniessen
404		in			Furcht	ausbrechen
405		in			Furcht	geraten
406		in			Furcht	halten
407		in			Furcht	schweben
408		in			Furcht	setzen
409		in			Furcht	versetzen
410		auf	der	?	Flucht	sein
411		in			Frage	stellen
412		in			Frage	stehen
413		ausser			Frage	stehen
414		0			Frechheit	besitzen
415		0			Folge	leisten

416		zur			Folge	haben	
417		in			Flammen	aufgehen	
418		in			Flammen	stehen	
419		ins			Flackern	geraten	
420		in			Gang	kommen	
421		in			Gang	halten	
422		in			Gang	sein	
423		in			Gang	bringen	
424		im			Gange	sein	
425		in			Gebrauch	haben	
426		in			Gebrauch	kommen	
427		in			Gebrauch	nehmen	
428		in			Gebrauch	sein	
429		zu			Gebote	haben	
430		zu			Gebote	stehen	
431		auf	den	einen	Gedanken	bringen	
432		in			Gedanken	sein	
433	sich	in	?	0	Geduld	fassen	
434		in			Gefahr	kommen	
435		in			Gefahr	bringen	
436	sich	in	?	?	Gefahr	befinden	
437		in			Gefahr	bleiben	
438		in			Gefahr	sein	
439		in			Gefahr	geraten	
440		in			Gefahr	schweben	
441		ins			Gedraenge	kommen	
442		in			Gefangenschaft	geraten	
443		0			Gefallen	haben	(an?)
444		in			Gespraech	kommen	
445		ins			Gespraech	kommen	
446		ins			Gespraech	bringen	
447		0			Gespraech	fuehren	
448		im			Gespraech	sein	
449		ins			Geschaeft	kommen	
450		0			Gehorsam	leisten	
451		zum			Gehoersam	bringen	
452		ins			Gerede	geraten	
453		ins			Gerede	bringen	
454		ins			Gerede	kommen	
455		0	die	eine	Garantie	geben	
456		0			Garantie	bekommen	
457		0	das	ein	Gastspiel	geben	
458		zum			Gespott	machen	
459		in			Gegesatz	stehen	
460		zu			Gehoer	bringen	
461		0			Gehoer	finden	
462		zu			Gehoer	kommen	

463	zur				Geltung	bringen
464	0				Geltung	haben
465	zur				Geltung	kommen
466	aus	dem	?		Gleichgewicht	bringen
467	ins				Gefecht	fuehren
468	ausser				Gefecht	setzen
469	zu				Gesicht	bekommen
470	in				Gewahrsam	geben
471	in				Gewahrsam	haben
472	in	der			Gewalt	haben
473	im				Gewinn	liegen
474	zur				Gewohnheit	machen
475	zur				Gewohnheit	werden
476	ins				Gruebeln	geraten
477	im				Griff	haben
478	in	den	?		Genuss	kommen
479	in				Gunst	kommen
480	bei			jmd	Gunst	stehen
481	zum				Halten	bringen
482	zum				Halten	kommen
483	in				Haft	nehmen
484	in				Haft	halten
485	in				Herstellung	gehen
486	0				Herrschaft	ausueben
487	in			jmd	Herrschaft	stehen
488	0	(die)			Hoffnung	haben
489	0				Hoffnung	machen
490	0				Hilfe	leisten
491	zu				Hilfe	nehmen
492	zu				Hilfe	kommen
493	0				Hilfe	bringen
494	0				Hilfe	bekommen
495	0				Hilfe	geben
496	0				Hilfe	erhalten
497	0				Hilfe	suchen
498	0				Hilfe	finden
499	in				Isolierung	geraten
500	0				Instand	bringen

A.2 List of SVCs with *geraten*

SVGID	REF	PREP	DEF	INDEF	XFACT	NOUN	VERB	POSTP
1013		in		ein		Abenteuer	geraten	
6		unter				Abhaengigkeit	geraten	
9		in				Abhaengigkeit	geraten	
995		in				Aerger	geraten	
253		in				Agitation	geraten	
26		in				Angst	geraten	
149		in				Armut	geraten	
141		in				Aufregung	geraten	
168		in				Aufruhr	geraten	
1010		in		eine		Auseinandersetzung	geraten	
197		in				Bedraengnis	geraten	
202		in				Begeisterung	geraten	
1018		in				Betrieb	geraten	
190		in				Bewegung	geraten	
262		in				Brand	geraten	
1004		in		eine		Depression	geraten	
988		in		ein		Dilemma	geraten	
283		in		eine		Diskussion	geraten	
287		unter				Druck	geraten	
998		in				Eifer	geraten	
982		unter				Einfluss	geraten	
984		in				Einzelheiten	geraten	
375		ins				Elend	geraten	
996		in				Empoerung	geraten	
1012		in	die			Enge	geraten	
1005		in				Entzuecken	geraten	
955		in				Entzueckung	geraten	
346		in				Erregung	geraten	
1020		in				Erschoepfung	geraten	
353		in				Erstaunen	geraten	
361		in				Extase	geraten	
999		aus	der			Fassung	geraten	
419		ins				Flackern	geraten	
1001		in				Fluss	geraten	
1014		in				Freiheit	geraten	
1006		in				Freude	geraten	
1000		aus	den			Fugen	geraten	
405		in				Furcht	geraten	
992		unters				Fussvolk	geraten	
130		in				Gang	geraten	
439		in				Gefahr	geraten	
442		in				Gefangenschaft	geraten	
452		ins				Gerede	geraten	
981		in			schlechte	Gesellschaft	geraten	

476	ins			Gruebeln	geraten
997	in			Harnisch	geraten
991	ins			Hintertreffen	geraten
953	in			Hysterie	geraten
499	in			Isolierung	geraten
989	in	die		Klemme	geraten
993	in			Konflikt	geraten
527	in			Konkurs	geraten
530	0			Kontroverse	geraten
980	in		eine	Krise	geraten
1008	ins			Lachen	geraten
1016	in		einen	Mangel	geraten
983	in			Misskredit	geraten
577	ins			Nachdenken	geraten
987	in			Not	geraten
956	in			Panik	geraten
1007	ins			Plaudern	geraten
66	in			Rage	geraten
954	zu			Reichtum	geraten
994	ins			Rennen	geraten
620	ins			Rollen	geraten
985	in			Rueckstand	geraten
1003	in		eine	Schlaegerei	geraten
657	ins			Schleudern	geraten
658	in			Schrecken	geraten
652	in			Schulden	geraten
644	ins			Schwanken	geraten
978	in			Schwierigkeiten	geraten
1019	in			Schwingung	geraten
643	ins			Schwitzen	geraten
979	in		eine	Situation	geraten
1011	in			Sorge	geraten
673	in			Staunen	geraten
674	ins			Staunen	geraten
683	in			Stimmung	geraten
694	ins			Stocken	geraten
679	in			Streit	geraten
1009	in		eine	Streiterei	geraten
696	ins			Stutzen	geraten
1015	in			Traeumerei	geraten
748	in			Unordnung	geraten
743	in			Unruhe	geraten
1017	in			Unsicherheit	geraten
754	in			Verdacht	geraten
765	in			Verfall	geraten
782	in			Vergessenheit	geraten
786	in			Verlegenheit	geraten

986	in		Verlust	geraten
848	in		Verruf	geraten
823	unter		Verschluss	geraten
856	in		Versuchung	geraten
810	in		Verwirrung	geraten
851	in		Verwunderung	geraten
830	in		Verzueckung	geraten
829	in		Verzug	geraten
832	in		Verzweiflung	geraten
878	in		Wallungen	geraten
880	ins		Wanken	geraten
890	in		Widerspruch	geraten
896	in		Wut	geraten
921	in		Zorn	geraten
1002	in		Zweifel	geraten
990	in	einen	Zwiespalt	geraten

Appendix B

B.1 *Duden* entry for *geraten*

1. **a) ohne Absicht, zufällig an eine bestimmte Stelle, irgendwohin gelangen [u. dadurch Nachteile erfahren, Schaden erleiden]**: in eine unbekannte Gegend, in ein Gewitter g.; das Auto geriet beim Schleudern an die Leitplanke; (ung.:) wie bist du den an diesen Kerl geraten?; der Hund geriet unter das Auto (*wurde überfahren*);

   b) in einen bestimmten Zustand, eine bestimmte Lage kommen: in Schulden, in eine gefährliche Situation, in eine Krise, in Not, in Verruf, in Schwierigkeiten, in schlechte Gesellschaft, unter schlechten Einfluss g.; die Zuschauer gerieten in einen Taumel der Begeisterung; die Forschung geriet in Misskredit; Aber damit geraten wir schon zu sehr in die Einzelheiten (Kosmos 3, 1965, 120); (häufig verblasst:) in Vergessenheit g. (*vergessen werden*); in Verfall g. (Papierdt.; *verfallen*); in Rückstand, in Verzug g. (*hinter der erwarteten Leistung zeitlich zurückbleiben; zum vergesehenen Zeitpunkt mit etw. nicht fertig werden*); in Aufruhr g. (sich auflehnen); in Erstaunen g. (*erstaunen*); in Gefangenschaft g. (*gefangengenommen werden*); in Zorn g. (*zorning werden*); in Verlegenheit g. (verlegen werden); in Verlust g. (Papierdt.; *verlorengehen*); in Brand g. (*Feuer fangen u. zu brennen anfangen*); in Wut g. (*wütend werden*); in Streit g. (*zu streiten anfangen*); ins Stocken g. (*zu stocken anfangen*);

2. **a) gelingen, gut ausfallen:** der Kuchen ist heute geraten; seine Kinder geraten (entwickeln sich gut);

   b) am Ende einer Herstellung bestimmte Eigenschaften aufweisen, ausfallen: das Essen ist [ihr] gut, schlecht geraten; das Brettchen geriet ihm sehr breit (Strittmatter, Wundertäter 185); (scherzh.:) Da stand er, ein erwachsener Mann, … etwas kurz geraten (Thiess, Legende 179).

Translation of *Duden* entry for *geraten*

3. (einem Eltern od. Grosselternteil) **ähnlich werden**: er gerät nach dem Vater.

1a. **without intention, by chance ending up at a certain place, somewhere [and thereby be in a disadvantage, be harmed]**: ending up in an unknown area, in a thunderstorm; the car ended up in the guard rail because of skidding; (colloquial) how did you end up with this guy?; the dog ended up under the car (*was run over*); **b**. **get into a specific state, a specific situation**: end up in debt, in a dangerous situation, in crisis, in distress, in difficulties, in bad company, under the wrong influence; the spectators ended up in a delirium of excitement; the research ended up in disrepute; but with that we get too deep into the minute details (Kosmos 3, 1965, 120); (often bleached:) end up in oblivion (*to be forgotten*); end up in disrepair. (paper German: *to expire*); end up in arrears, in delay (*be behind the expected payments time wise; not get done with something at a particular time*); end up in revolt (*to revolt*); end up in surprise (be surprised); end up in imprisonment (*get captured*).; end up in anger (*get angry*); get into embarrassment (*get embarrassed*); ending up lost (paper German: *to get lost*). start to burn (*to catch fire and starting to burn*); end up angry (*get angry*); end up in a fight (*start to fight*); ending up stagnating (*to start to stall*);

2a. **to turn out**: the cake turned out well today; his children turned out well (they thrived); b. to **have certain properties at the end of manufacturing; to turn out**: the food turned out well, not well; the slat turned out rather wide (Strittmatter, Wundertäter 185); (humorous) There he stood, a grown man, … turned out somewhat short (Thiess, Legende 179).

3. **to take after (a parent or grandparent)**: he takes after the father.

B.2 *Deutsches Wörterbuch* (DW) entry for *geraten*

1 es bezeichnet das zufällige Ergebnis einer Bewegung und berührt sich dabei mit *kommen*; *das sie nicht ins Hause geriet* Goe., *der Geist Gottes geriet über ihn* Lu., *dass du nicht geratest auf den Weg der Bösen* Lu., *wohin bin ich g.?, mit Schlägen aneinander g.* (Frisch), *an den falschen g*. (DWb), *da geräth man auszer sich* (1727; DWb) übertr. zur Bez. einer Entwicklung, präp. mit nach zur Bez. von Ähnlichkeit: *nach den eltern gerathen* (1570; DWb); im festen Gefüge: *in Gefahr, Noth gerathen* (Steinbach), *in Brand gerathen* (Kramer), *in Schulden, Zorn, ins Stocken g., in Vergessenheit gerathen* (Ad. 1775)

2 **a)**>sich entwickeln<: *es soll dir nicht zur Missetat g*. Lu., *dass sie ihm zum Fall gerate* Lu., *hast deine Kastanien zu lange gebraten: sie sind dir alle zu Kohlen g.* Goe.; spez. i.S.v.

b)>gelingen<, auf Kinder bezogen: *geret .. eine Tochter bas/denn der son* (Lu. Sir. 36,23) *es gerät ihr gut, schlecht, nach Wunsch, die Kartoffeln sind gut, wohlg*., ohne Best.: *das Unternehmen ist ihr g*.

Translation for *Deutsches Wörterbuch* (DW) entry for *geraten*

1. it describes the coincidental outcome of a motion and intersects with *to come*; *that she did not end up in the house* Goe., *God's spirit came over him* Lu., *that you do not end up on the on the road of the evil* Lu., *where did I end up*? They ended up beating each other (Frisch), one *runs into the wrong person* (DWb), *one is losing it* (1727 DWb) exaggerated for the designation of a development, prep with, after, to the designation of similarity; *take after the parents* (1570; DWb); in fixed structure: *end up in danger, in distress* (Steinbach), *starting to burn* (Kramer), *get into debt, anger, stalling, ending up in oblivion* (Ad. 1775)

2a. >to develop< *you should not succeed in your misdeed* Lu., *that she be his downfall* Lu., *roasted your chestnuts too long: they all ended up burning to coals*. Goe.; special i.S.v. b. >succeed<, applicable to children: a daughter turned out well/then the son (Lu. Sir. 36,23) it turns out well for her, bad, after her wishes, the potatoes turned out well, without designation: the endeavor turned out well for her.

B.3 ***Wörterbuch der deutschen Gegenwartssprache*** **(WDDG) entry for** ***geraten***

1. **gelingen**: d. Braten, Kuchen ist (mir) heute nicht g.; nach diesem Rezept gerät der Kuchen immer; das ist mir ausgezeichnet, gut, nach Wunsch, schlecht g.; *sich entwickeln*: seine Kinder g. gut; alles gerät (ihm) zum Guten, zum besten; *gedeihen*: d. Korn, Wein ist dieses Jahr gut g.; umg. scherzh. d. Kleid, Rock ist zu kurz g. (*zu kurz gemacht worden*)

2. nach jmdm. g. jmdm. **ähnlich werden**: das Kind gerät nach dem Vater, der Mutter

3. **unbeabsichtigt irgendwohin gelangen**, **kommen**
   a) in ein abgelegenes Dorf, in eine unwegsame Gegend g.; wohin sind wir g.?; das Schiff ist auf Grund g.; in einen Schneesturm g.; /bildl./ er ist auf Abwege, auf die schiefe Bahn, in schlechte Gesellschaft g.; umg. etw. gerät jmdm. in die Finger, Hände]; in unrechte Hände g.; salopp an die falsche, unrechte Adresse g.; wie bist du denn an den g.?; umg. an den Unrechten g.; Du kannst froh sein, Lutz, daß du an mich geraten bist (Dürrenmatt *Richter* 64).

   b) */übertr./* **in eine unangenehme Lage kommen**: in eine gefährliche Situation, in Gefahr g.; in Not, Bedrängnis, Schwierigkeiten, Schulden, umg. in ein schönes Dilemma, in die Klemme, salopp in (des) Teufels Küche g.; in einen Zwiespalt, umg. zwischen zwei Feuer, Stühle g.; er ist ins Hintertreffen, unters Fussvolk g.; in Misskredit, Verrruf, Verdacht g.; der Vorschlag ist in Vergessenheit g.; in Versuchung g., etw. zu tun; verhüll. mit dem Gesetz in Konflikt g. (*gegen das Gesetz verstossen*); papierdt. in Verzug g. (*Rückstände haben*); in Verlust g. (*verlorengehen*).

   c) in eine andere Stimmung kommen: in Erregung, Ärger, Wut, Zorn, Empörung, umg. Harnisch, Aufregung, Verwirrung, Angst, Eifer, Ekstase g.; er ist ganz aus seinem (inneren) Gleichgewicht g.; aus der, ausser Fassung, ausser sich, ausser Rand und Band, umg. Aus dem Häuschen g.

   d) /drückt in abgeschwächter Bedeutung einen Beginn aus/ die Ordnung gerät aus den Fugen; das Volk geriet in Aufruhr; sie sind in Streit, umg. sich in die Haare g.; die Dinge g. in Fluss, Bewegung; die Verhandlungen sind ins Stocken g.; das Haus ist in Brand g.; sein Entschluss geriet ins Wanken; ich bin in Zweifel g., ob das stimmt.

Translation for *Wörterbuch der deutschen Gegenwartssprache* (WDDG) entry for *geraten*

1. **to succeed**: the roast, cake did not turn out successful today (for me).; according to this recipe the cake always turns out well; this worked out very well for me, good, according to my wishes, not good.; *to turn out*: his children turned out well; everything turns out for the best (for him); *to thrive/flourish*: the grain, the wine flourished this year; colloquial-humorous. the dress, skirt turned out too short (*was made too short*)

2. to **take after** someone: the child takes after the father, the mother.

3**a**. **unintentionally ending up somewhere, come a**. ending up in an isolated town, in an impassible area.; where did we end up?; the boat ran aground; ending up in a snow storm; /metaphorical/ he went astray, ended up delinquent, ended up in poor company, colloquial. someone gets his fingers/hands on something, end up in the wrong hands; casual. end up at the wrong, incorrect address; how did you end up with this guy?; colloquial. run into the wrong person; You can be happy, Lutz, that you ran into me (Dürrenmatt *Richter* 64). **b**. /metaph./ **to end up in an uncomfortable situation**: get into a dangerous situation, get into danger; in hardship, plight, difficulties, debt, colloquial in a nice dilemma, get between a rock and a hard place. casual end up in (the) devil's kitchen; get into discrepancy, colloquial end up between two fires, chairs; he ended up in a disadvantage, under rank and file; end up in discredit, disrepute, suspicion; the suggestion ended up in oblivion; get tempted, to do something, get in conflict with the law (to break the law); paper German. end up in default (to be in arrears with payments); ending in loss (to get lost). **c**. **get into a different mood**: end up in excitement, aggravation, anger, anger, disgust, colloquial. in armor, excitement, confusion, fear, zeal, ecstasy; he has totally lost his (inner) balance; get out of balance, frantic, going wild, colloquial. to end up beside oneself. **d**. **/expresses in a weaker meaning a beginning/** order is getting out of hand; the people are getting in revolt; they are getting into a fight,

colloquial. to end up in each other's hair; things get moving, in motion, in motion, the negotiations started to stall; the house started to burn; he started to waver about his decision; I started to doubt if that is really true.

Appendix C
C.1 Frame description of `Motion` frame

Motion

Lexical Unit Index

Definition:

Some entity (Theme) starts out in one place (Source) and ends up in some other place (Goal), having covered some space between the two (Path). Alternatively, the Area or Direction in which the Theme moves or the Distance of the movement may be mentioned.

That kite you see just to the right of his head was MOVING around pretty fast but the camera seemed to catch it ok.

There are several accounts of the stench DRIFTING to shore from the ships in the middle of the river

Dust particles FLOATING about made him sneeze uncontrollably.

The grill, unsecured, ROLLED a few feet across the yard.

The swarm WENT away to the end of the hall.

The frames that inherit the general Motion frame add some elaboration to this simple idea. Inheriting frames can add Goal-profiling (arrive, reach), Source-profiling (leave, depart), or Path-profiling (traverse, cross), or aspects of the manner of motion (run, jog) or assumptions about the shape-properties, etc., of any of the places involved (insert, extract). A particularly complex area in the vocabulary of Motion is the depiction of the relation of Vehicles to the Theme. In some cases, no separate Theme is expressed:

The plane FLEW over the city.

In this case, the sentence is annotated in Self_motion. When the Vehicle is profiled as being operated by a Driver, the sentence is annotated in the Operate_vehicles frame:

Don't try to FLY an F-16 without training!

This is very similar to the Bringing frame which covers cases where the Vehicle is necessarily involved, but the movement of the Theme (something carried by the Vehicle) is profiled:

It's scary FLYING hundreds of people over thousands of miles of ocean every day.

Some of the same vocabulary is also used to describe the situation where Passengers Ride_vehicle or Operate_vehicle (each of these a perspective on Use_vehicles):

I FLEW to Chicago on the red-eye.

I FLEW my plane across the Canadian border

Finally, there are cases where, despite the use of similar vocabulary, there is no self-propelled Vehicle involved at all:

The ball FLEW over the fence.

This last type is annotated in the simple Motion frame.

FEs:

Core:

Area [Area]	Area identifies the setting in which the Theme's movement takes place without a specified Path. Emily MOVED restlessly around the room.
Direction [] **Excludes:** Area	This FE is used for expressions that indicate motion along a line from the deitic center towards a reference point (which may be implicit) that is neither the Goal of the posture change nor a landmark along the way of the moving part of the body. Often Direction is defined with reference to the canonical orientation of the Protagonist, or the orientation imposed by an implicit observer.
Distance [Dist] **Excludes:** Area	Distance is any expression which characterizes the extent of the Motion. The twig FLOATED atop the water for about 100 yards.
Goal [Goal] **Semantic Type:** Goal **Excludes:** Area	The Goal is the location the Theme ends up in. The car MOVED into the slow lane.
Path [Path] **Excludes:** Area	The Path refers to (a part of) the ground over which the Theme travels or to a landmark by which the Theme travels. Jo MOVED past Dad into the hall.
Source [Src] **Semantic Type:** Source **Excludes:** Area	The Source is the location the Theme occupies initially before its change of location. The policeman MOVED away from the door.
Theme [Thm] **Semantic Type:** Physical_object	The Theme is the entity that changes location. Note that it is not necessarily a self-mover. The explosion made me MOVE in a hurry.

Non-Core:

Carrier [Car]	The Carrier is the means of conveyance of the Theme. The nest BLEW from its tree in a gale.
Containing_event [con]	An event that the described motion forms an integral part of.
Degree [Degr] **Semantic Type:** Degree	The extent to which the Theme cross a boundary as it moves away from a Source region or into a Goal region. Pluto has MOVED fullyinto Sagittarius
Depictive [Dep]	This FE is used for any Depictive phrase describing the state of the Theme while the motion is occuring.
Duration [Dur] **Semantic Type:** Duration	This FE identifies the Duration of time for which the Motion takes place. The balloon FLOATED for hours.
Frequency []	This frame element is defined as the number of times an event occurs per some unit of time. A Frequency expression answers the question how often.
Iteration []	The frame element Iteration is used for expressions that indicate the number of times an event or state (of the kind denoted by the target in its clause) has taken place or held.
Manner [Manr] **Semantic Type:** Manner	This FE identifies the Manner in which the Motion takes place. A naval airship DRIFTED wildy in the stormy sea.
Path_shape [sha]	The shape of the overall Path travelled by the Theme. They DRIFTED in circles for weeks before rescue .
Place [] **Semantic Type:** Locative_relation	The Place is the general area in which a specific motion (with Source, Path, or Goal) occurs.
Purpose [pur] **Semantic Type:** State_of_affairs	In cases wherein the Theme is construed as a sentient entity, this FE denotes the state of affairs that the entity wishes to bring about by

moving.
Johnny WENT to Langley to turn himself in.

Result [Result]

Result identifies the ultimate effect of the Motion.
The feathers FLOATED together on the water's surface.

Speed [Spd]
Semantic Type: Speed

This FE is used for the Speed at which the Theme moves.
The ash cloud DRIFTED at twenty-five kilometres per hour.

Time [Time]
Semantic Type: Time

This FE identifies the Time when the Motion occurs.
A radioactive cloud DRIFTED across Britain after the fire at the Windscale nuclear factory.

FE Core set(s):

{Direction, Distance, Goal, Path, Source}

Frame-frame Relations:

Inherits from:
Is Inherited by: Fluidic_motion, Mass_motion, Motion_directional, Motion_noise, Self_motion, Traversing
Perspective on: Motion_scenario
Is Perspectivized in:
Uses:
Is Used by: Body_movement, Bringing, Change_direction, Cotheme, Departing, Emanating, Evading, Excreting, Fluidic_motion, Light_movement, Motion_noise, Operate_vehicle, Path_traveled, Placing, Redirecting, Removing, Roadways
Subframe of:
Has Subframe(s): Getting_underway, Halt
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also:

Lexical Units:

blow.v, circle.v, coast.v, drift.v, float.v, fly.v, glide.v, go.v, meander.v, move.v, roll.v, slide.v, snake.v, soar.v, spiral.v, swerve.v, swing.v, travel.v, undulate.v, weave.v, wind.v, zigzag.v

C.2 Frame description of `Unintentional_act` frame.

Unintentionally_act

Lexical Unit Index

Definition:

This is an abstract frame for acts performed by sentient beings or events. It exists mostly for FE inheritance.

FEs:

Core:

Agent [Agt] **Semantic Type:** Sentient **Core Unexpressed:**	The Agent performs the unintentional act.
Act [Act] **Semantic Type:** State_of_affairs **Non-Core:**	This FE identifies the Act that the Agent performs unintentionally.
Domain [dom] No doubt he has begun to engage in political ACTIVITY of late	The Domain within which the Agent acts.
Event_dscription []	This FE gives a description of the Unintentionally_act event.
Explanation []	The Explanation denotes a proposition from which the main clause (headed by the target) logically follows. This often means that the Explanation causes the state of affairs expressed by the target, but not in all cases.
Frequency [fre]	The Frequency with which the Agent does the Act in a given period of time.
Manner [Mnr] **Semantic Type:** Manner	Any description of the unintentional act which is not covered by more specific FEs, including secondary effects (quietly, loudly), and general descriptions comparing events (the same way). In addition, it

	may indicate salient characteristics of an Agent that also affect the action (presumptuously, coldly, deliberately, eagerly, carefully).
'Twould be best it were DONE quietly.	
Means [Means] **Semantic Type:** State_of_affairs	This FE identifies the Means by which an Agent acts unintentionally.
Particular_iteration [par]	Expressions marked with this extra-thematic FE modify a non-iterative use of the target, and indicate that it is conceived as embedded within an iterated series of similar events or states.
Period_of_iterations []	The length of time from when the event denoted by the target began to be repeated to when it stopped.
Place [Place] **Semantic Type:** Locative_relation	This FE identifies the place where the unintentional act occurs.
Purpose [Purp] **Semantic Type:** State_of_affairs	This FE identifies the purpose for which an Agent performs an unintentional act. John FLATTERED her to receive a raise.
Result []	The Result of an act.
Time [Time] **Semantic Type:** Time	This FE identifies the time when the Agent acts unintentionally.

Frame-frame Relations:

Inherits from: Event
Is Inherited by: Activity_finish, Assistance, Atonement, Avoiding, Bail_decision, Becoming_a_member, Change_posture, Change_tool, Choosing, Clemency, Collaboration, Confronting_problem, Daring, Examination, Exchange, Execute_plan, Forming_relationships, Front_for, Get_a_job, Giving, Heralding, Hostile_encounter, Ingest_substance, Unintentionally_affect, Unintentionally_create, Intercepting, Name_conferral, Passing_off, Perception_active, Piracy, Practice, Quitting, Resolve_problem, Ruling_legally, Self_motion, Verdict, Visiting
Perspective on:
Is Perspectivized in:
Uses:
Is Used by: Accomplishment, Assemble, Assistance, Bungling, Competition, Conduct, Deciding, Experience_bodily_harm, Reason, Remembering_to_do, Rite, Subjective_influence, Terrorism, Waiting
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:

Appendix D

Frame description of `Emotion_directed` frame.

Emotion_directed

Lexical Unit Index

Definition:

The adjectives and nouns in this frame describe an Experiencer who is feeling or experiencing a particular emotional response to a Stimulus or about a Topic. There can also be a Circumstances under which the response occurs or a Reason that the Stimulus evokes the particular response in the Experiencer.

Mr. Whiskers is UPSET that there are no more cat treats.

The FURIOUS parent stormed into the office.

Franz gets INFURIATED at the thought of his ex-wife remarried.

She flashed a JUBILANT smile.

FEs:

Core:

Event [Event] **Semantic Type:** State_of_affairs **Excludes:** Expressor	The Event is the occasion or happening that Experiencers in a certain emotional state participate in. The end of the film was filled with JUBILANT scenes. [Here we know that the scenes are filled with jubilant Experiencers.]
Experiencer [Exp] **Semantic Type:** Sentient **Excludes:** Event	The Experiencer is the person or sentient entity that experiences or feels the emotions. Nan Ho turned, his extreme AGITATION unnoticed by the Prince.
Expressor [Exr] **Excludes:** Experiencer	The Frame Element Expressor marks expressions that indicate a body part, gesture or other expression of the Experiencer that reflects his or her emotional state. They describe a presentation of the experience or emotion denoted by the adjective or noun. "Can I help you?" she asked, trying not to let him see the AMUSEMENT in her blue eyes.

State [State]

The State is the abstract noun that describes a more lasting experience by the Experiencer.

Tracy was in an IRRITATED mood.

Stimulus [Stim]

The Stimulus is the person, event, or state of affairs that evokes the emotional response in the Experiencer.

Liz's ANGER towards Raquel dates back to a charity dinner this year.

The feeling the bereaved find most difficult to acknowledge is their ANGER against the dead person for abandoning them to face the world alone.

Jack Smith openly discussed his innermost ANGUISH at being one of only three England players not to kick a ball during finals.

David filled her dreams; the ecstasy of their lovemaking, and the pain and BEWILDERMENT of his abrupt departure.

Topic [Top]

The Topic is the general area in which the emotion occurs. It indicates a range of possible Stimulus.

I was ANGRY about the war.

So tell the world, and its BOREDOM about your troubles will heal you.

Non-Core:

Circumstances [cir]

The Circumstances is the condition(s) under which the Stimulus evokes its response. In some cases it may appear without an explicit Stimulus.

One career wife spoke about her EXASPERATION when her husband listened to her with half an ear as he watched television.

Bob is INFURIATED whenever I play loud music.

Degree [Degr] **Semantic Type:** Degree	The Degree is the degree to which the Experiencer feels the emotion. Nan Ho turned, his extreme AGITATION unnoticed by the Prince .
Empathy_target [ET]	The Empathy_target is the individual or individuals with which the Experiencer identifies emotionally and thus shares their emotional response. I am HAPPY for Sara.
Frequency []	
Manner [] **Semantic Type:** Manner	The Manner is the way in which the Experiencer experiences the Stimulus.
Parameter []	The Parameter is a domain in which the Experiencer experiences the Stimulus.
Reason [Reas] **Semantic Type:** State_of_affairs	The Reason is the explanation for why the Stimulus evokes a certain emotional response. The feeling the bereaved find most difficult to acknowledge is their ANGER against the dead person for abandoning them to face the world alone.

FE Core set(s):

{Stimulus, Topic}, {Experiencer, Expressor, State}

Frame-frame Relations:

Inherits from:
Is Inherited by:
Perspective on:
Is Perspectivized in:
Uses: Emotions
Is Used by:
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:

Is Causative of:
See also:

Lexical Units:

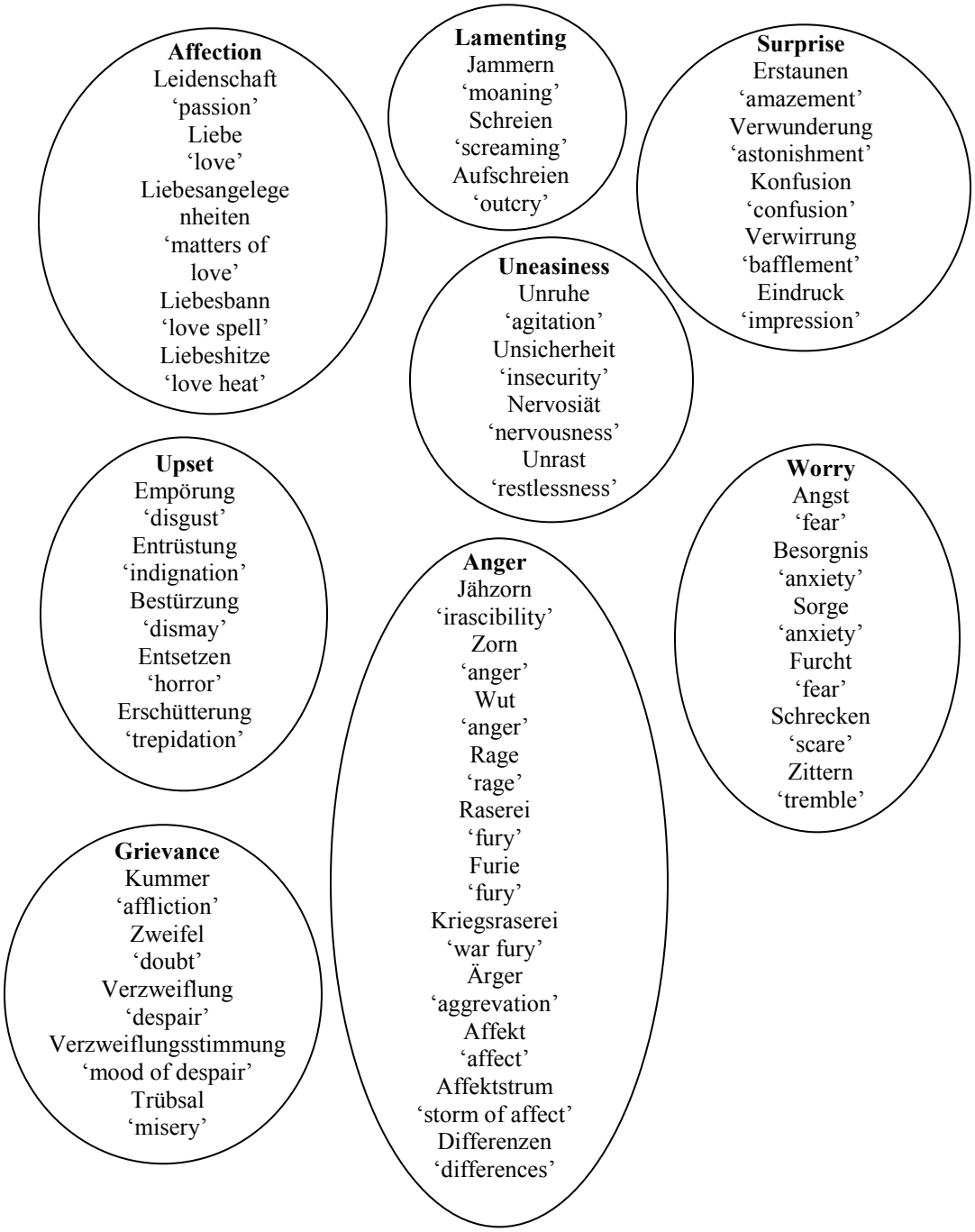
abashed.a, affronted.a, agitated.a, agitation.n, agonized.a, agony.n, alarmed.a, all about.prep, amused.a, amusement.n, anger.n, angry.a, anguish.n, anguished.a, annoyance.n, annoyed.a, anxious.a, appalled.a, ashamed.a, astonished.a, astonishment.n, astounded.a, baffled.a, bafflement.n, befuddled.a, bewildered.a, bewilderment.n, blue.a, bored.a, boredom.n, chagrin.n, chagrined.a, concern.n, concerned.a, contented.a, covetous.a, crestfallen.a, cross.a, crushed.a, dejected.a, dejection.n, delight.n, delighted.a, demolished.a, depressed.a, desolate.a, despair.n, despondency.n, despondent.a, devastated.a, disappointed.a, disappointment.n, discomfited.a, discomfiture.n, disconcerted.a, disconcertion.n, disconsolate.a, discouraged.a, discouragement.n, disgruntled.a, disgruntlement.n, disheartened.a, dismay.n, dismayed.a, disorientation.n, disoriented.a, displeased.a, displeasure.n, disquiet.n, disquieted.a, distress.n, distressed.a, downcast.a, downhearted.a, ecstatic.a, elated.a, elation.n, embarrassed.a, embarrassment.n, embittered.a, enraged.a, exasperated.a, exasperation.n, excited.a, excitement.n, exhilarated.a, exhilaration.n, fascinated.a, fed up.a, fed-up.a, flabbergasted.a, flummoxed.a, flustered.a, frightened.a, furious.a, fury.n, glee.n, gleeful.a, glum.a, glumness.n, gratification.n, gratified.a, grief-stricken.a, grief.n, happy.a, harried.a, heartbreak.n, heartbroken.a, horrified.a, horror.n, humiliated.a, incensed.a, inconsolable.a, indignant.a, infuriated.a, interest.n, irate.a, irked.a, irritated.a, jubilant.a, livid.a, low-spirited.a, lugubrious.a, mad.a, miffed.a, miserable.a, mortification.n, mortified.a, mournful.a, mourning.n, mystification.n, mystified.a, nervous.a, nettled.a, nonplussed.a, offended.a, outrage.n, overjoyed.a, overwrought.a, peeved.a, perplexed.a, perplexity.n, perturbed.a, petrified.a, pleased.a, puzzlement.n, rattled.a, relaxed.a, resentful.a, revolted.a, revulsion.n, riled.a, ruffled.a, sad.a, saddened.a, sadness.n, shocked.a, sickened.a, sore.a, sorrow.n, sorrowful.a, startled.a, stressed.a, stunned.a, stupefaction.n, stupefied.a, sympathetic.a, sympathize.v, sympathy.n, terror-stricken.a, thrilled.a, tormented.a, traumatised.a, unsettled.a, unsympathetic.a, upset.a, vexation.n, vexed.a, woebegone.a, worried.a, wretched.a

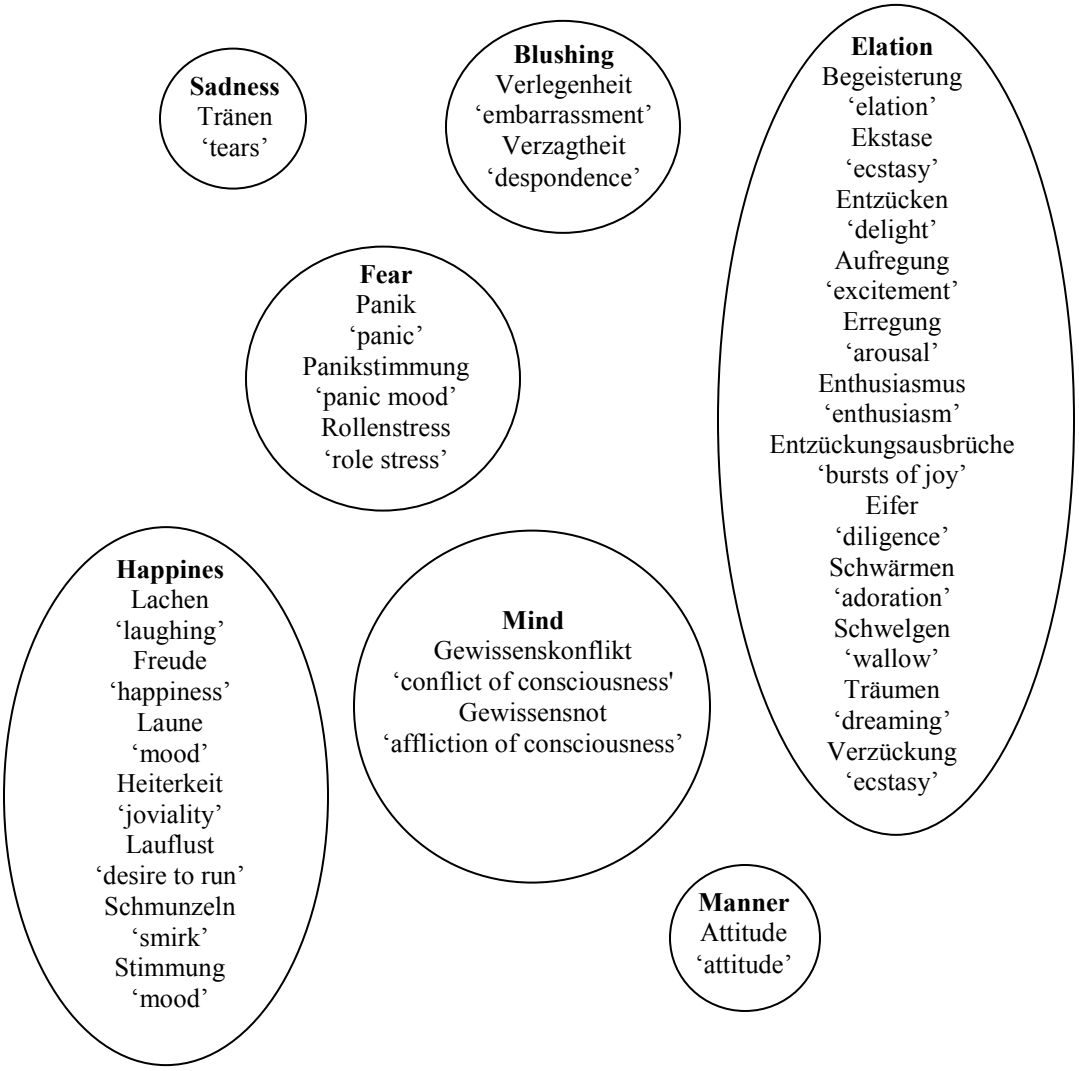
Created by 731 on 02/07/2001 04:12:06 PST Wed

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
abashed.a	**Finished_Initial**	Lexical entry	Annotation	296	08/08/2002 02:48:43 PDT Thu
affronted.a	**Finished_Initial**	Lexical entry	Annotation	296	08/08/2002 04:28:52 PDT Thu

Appendix E

The following lists all semantic islands of emotion NPs[tgt]




Sadness
Tränen
‘tears’
Blushing
Verlegenheit
‘embarrassment’
Verzagtheit
‘despondence’
Elation
Begeisterung
‘elation’
Ekstase
‘ecstasy’
Entzücken
‘delight’
Aufregung
‘excitement’
Erregung
‘arousal’
Enthusiasmus
‘enthusiasm’
Entzückungsausbrüche
‘bursts of joy’
Eifer
‘diligence’
Schwärmen
‘adoration’
Schwelgen
‘wallow’
Träumen
‘dreaming’
Verzückung
‘ecstasy’
Fear
Panik
‘panic’
Panikstimmung
‘panic mood’
Rollenstress
‘role stress’
Happines
Lachen
‘laughing’
Freude
‘happiness’
Laune
‘mood’
Heiterkeit
‘joviality’
Lauflust
‘desire to run’
Schmunzeln
‘smirk’
Stimmung
‘mood’
Mind
Gewissenskonflikt
‘conflict of consciousness'
Gewissensnot
‘affliction of consciousness’
Manner
Attitude
‘attitude’

Appendix F

Synonyms (Syn), Subterms (UntB), and Superordinate (UebB) terms for nouns encoding emotion

	SN	UntB (DWDS)	Syn (DWDS)	UebB (DWDS)	Other Dictionaries
in	Angst	Exitenzangst			
		Gewissensangst			Aengstlichkeit
		Heidenangst			Angstzustand
		Herzensangst			
		Lampenfieber?			
		Lebensangst	Schauder		
		Platzangst			
		Schauder?	Schiss?		
		Scheissangst	Todesnot		
			Torschlusspanik		
		Seelenangst			
		Sterbensangst			
		Todesangst			
in	Aufregung	none	Durcheinander	Erregung	Aufgeregtheit
			Theater		Erregtheit
			Wirbel		
in	Begeisterung		Entzueckung		Elan
					Hochstimmung
					Lust
					Passion
					Verzueecktheit
in	Erregung	Premierenfieber	Schreck		Veraergerung
		Reisefieber			Erzuernung
					Unwillen
					Stinkwut
					Aufgeregtheit
					Erregtheit
					Gereiztheit
					Hysterie
					Ruhelosigkeit
					Hochstimmung
					Lust
					Aufwallung
					Exaltation
in	Erstaunen		Ueberraschung		

in	Extase/Ekstase	None			no syn or n-syn
in	Furcht	Grauen	None		Herzensangst
ins	Gruebeln	None	None	None	no syn or n-syn
in	Schrecken				Unheil
					Verderben
					Inferno
in	Stimmung	Gereiztheit	Atmosphaere		Gemuetslage
		Hochstimmung	Festlichkeit		Faszination
		Missstimmung			
		Schwermut			
		Sektlaune			
		Siegesstimmung			
		Weinlaune			
in	Unruhe	Beunruhigung	Krakeel		Hysterie
			Besorgnis		Aufgeregtheit
			Angstgefuehl		Hektik
			Zwischenfall		Ruhelosigkeit
					Ueberreizung
					Ungeduld
					Zappeligkeit
					Unbehagen
					Argwohn
					Herzensangst
in	Verlegenheit	Geldverlegenheit			Hilfslosigkeit
					Schuechternheit
in	Verwirrung	None	None	None	Fassungslosigkeit
					Kopflosigkeit
					Verblueffung
					Verstoertheit

					Verwirrtheit
in	Verzueckung	None	None	None	
in	Verzweiflung	None	Hoffungslosigkeit	Niedergeschlagenheit	
					Gefuehl d Aussichtsloigkeit
					Gefuhel d Auswegslosigkeit
					Hilflosigkeit
					Mutlosigkeit
					Schwermut
					Trauer
in	Verwunderung			None	
in	Wallungen	None	Bewegtheit		
in	Wut	Stinkwut			Aufgebrachtheit
		Tobsucht			Gereiztheit
					Missmut
					Verstimung
					Bitternis
in	Zorn				Aufgebrachtheit
					Gereiztheit
					Missmut
					Tobsucht
					Verstimung
					Bitternis

Appendix G

G.1 WordNet entry for *Rage*

WordNet Search - 3.0 - WordNet home page - Glossary - Help

Word to search for: Rage Search WordNet

Display Options: (Select option to change) Change

Key: "S:" = Show Synset (semantic) relations, "W:" = Show Word (lexical) relations

Noun

- S: (n) fury, **rage**, madness (a feeling of intense anger) *"hell hath no fury like a woman scorned"; "his face turned red with rage"*
  - ***direct hyponym*** / *full hyponym*
  - *direct hypernym* / *inherited hypernym* / *sister term*
    - S: (n) anger, choler, ire (a strong emotion; a feeling that is oriented toward some real or supposed grievance)
      - S: (n) emotion (any strong feeling)
        - S: (n) feeling (the experiencing of affective and emotional states) *"she had a feeling of euphoria"; "he had terrible feelings of guilt"; "I disliked him and the feeling was mutual"*
          - S: (n) state (the way something is with respect to its main attributes) *"the current state of knowledge"; "his state of health"; "in a weak financial state"*
            - S: (n) attribute (an abstraction belonging to or characteristic of an entity)
              - S: (n) abstraction, abstract entity (a general concept formed by extracting common features from specific examples)
                - S: (n) entity (that which is perceived or known or inferred to have its own distinct existence (living or nonliving))
  - *derivationally related form*
- S: (n) **rage** (a state of extreme anger) *"she fell into a rage and refused to answer"*
- S: (n) **rage**, passion (something that is desired intensely) *"his rage for fame destroyed him"*
- S: (n) **rage** (violent state of the elements) *"the sea hurled itself in thundering rage against the rocks"*
- S: (n) fad, craze, furor, furore, cult, **rage** (an interest followed with exaggerated zeal) *"he always follows the latest fads"; "it was all the rage that season"*

Verb

- S: (v) ramp, **rage**, storm (behave violently, as if in state of a great anger)
- S: (v) **rage** (be violent; as of fires and storms)
- S: (v) **rage** (feel intense anger) *"Rage against the dying of the light!"*

WordNet home page

G.2 WordNet entry for *Affect*

WordNet Search - 3.0 - WordNet home page - Glossary - Help

Word to search for: Affect [Search WordNet]

Display Options: (Select option to change) [Change]

Key: "S:" = Show Synset (semantic) relations, "W:" = Show Word (lexical) relations

Noun

- S: (n) **affect** (the conscious subjective aspect of feeling or emotion)
  - *direct hypernym* / ***inherited hypernym*** / *sister term*
    - S: (n) feeling (the experiencing of affective and emotional states) *"she had a feeling of euphoria"; "he had terrible feelings of guilt"; "I disliked him and the feeling was mutual"*
      - S: (n) state (the way something is with respect to its main attributes) *"the current state of knowledge"; "his state of health"; "in a weak financial state"*
        - S: (n) attribute (an abstraction belonging to or characteristic of an entity)
          - S: (n) abstraction, abstract entity (a general concept formed by extracting common features from specific examples)
            - S: (n) entity (that which is perceived or known or inferred to have its own distinct existence (living or nonliving))
  - *derivationally related form*

Verb

- S: (v) **affect**, impact, bear upon, bear on, touch on, touch (have an effect upon) *"Will the new rules affect me?"*
- S: (v) **affect** (act physically on; have an effect upon) *"the medicine affects my heart rate"*
- S: (v) involve, **affect**, regard (connect closely and often incriminatingly) *"This new ruling affects your business"*
- S: (v) feign, sham, pretend, **affect**, dissemble (make believe with the intent to deceive) *"He feigned that he was ill"; "He shammed a headache"*
- S: (v) **affect**, impress, move, strike (have an emotional or cognitive impact upon) *"This child impressed me as unusually mature"; "This behavior struck me as odd"*

WordNet home page

Appendix H

Continuum Emotion Nouns
SVCs with *geraten* encoding an unintentional change in emotion

The following table lists possible noun substitutes for each of the nouns listed at the beginning of each row.

'Core nouns'	Possible noun substitutes		
(H.1) Frozen; no substitute Target NPs			
a) ins Grübeln			
(H.2) 1-5 substitute Target NPs			
a) in Erstaunen	Verwunderung		
b) in Extase/Ekstase	Begeisterung		
c) in Verzückung	Begeisterung		
d) in Verwunderung	Erstaunen		
e) in Stimmung	Laune	Eindruck	
f) in Verlegenheit	Unsicherheit	Verwirrung	
g) in Verzweiflung	Trübsal	Verzagtheit	
h) in Furcht	Gefühl	Angst	Panik
(H.3) 6-10 substitute Target NPs			
a) in Angst	Furcht	Sorge	Gefühl	Panik
b) in Aufregung	Erregung	Konfusion	Unruhe	Verwirrung

c) in Verwirrung	Aufregung	Konfusion	Unruhe	Bestürzung
d) in Schrecken	Entsetzen	Furie	Angst	Panik
e) in Wallungen	Erregung Zorn	Affekt	Aufregung	Wut

(H.4) 10-15 substitute Target NPs

a) in Zorn	Jähzorn Erregung	Empörung Raserei	Ärger Wut	Entrüstung Rage
b) in Unruhe	Furie Aufregung Nervosität	Unrast Gespanntheit	Erregung Furcht	Empörung Sorge
c) in Wut	Furie Empörung Raserei	Rage Entrüstung Zorn	Eifer Erregung	Ärger Jähzorn

(H.5) 15+ substitute Target NPs

a) in Erregung	Affekt Enrüstung Nervosität Leidentschaft	Aufregung Wut Unruhe Verzückung	Ärger Zorn Begeisterung Enthusiasmus	Empörung Rage Exstase

Appendix I

Synoyms for *Armut* (‘poverty’), *Elend* (‘distress’), *Not* (‘misery’), and *Unglück* (‘disaster’)

	Duden Synonymwörterbuch	Wörterbuch synoyme	Synoyme: Sinn- und sachverwandte Wörter
Armut	a)	1)	1)
	Ärmlichkeit	Mittellosigkeit	Bedürfigkeit
	Bedürftigkeit	Besitzlosigkeit	Besitzlosigkeit
	Besitzlosigkeit	Unbemitteltheit	Elend
	Elend	Bedürftigkeit	Geldnot
	Geldmangel	Elend	Geldmangel
	Geldnot	Not	Mittellosigkeit
	Mittellosigkeit	Verarmung	Not
	Not		
	Unvermögenheit	2)	2)
		Geistlosigkeit	Geistlosigkeit
	b)	Leere	Leere
	Armseligkeit		
	Dürftigkeit	3)	
	Kargheit	in Armut geraten->verarmen	
	Knappheit		
	Kümmerlichkeit		
	Mangel		
	Spärlichkeit		
Elend	1)	1)	Noun not listed
	Hoffunungslosigkeit	Unglück	
	Jammer	Jammeranblick	
	Kreuz		
	Kummer	2)	
	Last	Armut	
	Leid		
	Qual	3)	
	Quälerei	Leid	
	Schmerz		
	Seelenschmerz		
	Trostlosigkeit		
	Unglück		

Verderben
Verzweiflung

2)
Ärmlichkeit
Armseligkeit
Armut
Bedürftigkeit
Entbehrung
Geldnot
Kargheit
Mittellosigkeit
Not
Notstand
Verelendung

Not

1)
Dilemma
Kalamität
missliche Lage/Situation
Misslichkeit
Notfall
Notlage
Notsituation
Notstand
schwier. Lage/Situation
Schwierigkeit
Zwangslage
(ugs) Bredouille
(ugs)Klemme
(ugs) Patsche
(ugs) Schlamassel
(ugs) Schwulitäten
(ugs) Tinte
(ugs) Zwickmühle

2)
Ärmlichkeit
Armseligkeit
Bedürftigkeit
Elend

1)
Notstand
Notlage
Notsituation
Misere
Bedrängnis
Drangsal+Druck

2)
Armut
Auswegslosigkeit

3)
zur Not ->notfalls
Helfer i.d.N-> Retter
Not leiden->darben,
Not leidend
a)
arm
b)
hilfsbedürftig
nur mit Müh und Not
ohne Not->freiwillig

1)
Armseligkeit
Bedrängnis
Dilemma
Elend
Leid
Notlage
Zwangslage

Entbehrung
Knappheit
Mangel
Mittellosigkeit
Unvermögenheit
3)
Auswegslosigkeit
Hilfslosigkeit
Hoffnungslosigkeit
Ratlosigkeit
Sackgasse
Trostlosigkeit

4)
Anstrengung
Arbeit
Kreuz
Last
Mühe
Strapaze

Unglück

1)
Desaster
Drama
Fiasko
GAU
Katastrophe
Schlag
Tragödie
Unfall
Unglücksfall
Verhängnis

2a)
Elend
Jammer
Leid
Drangsal
Gram
Kümmernis
Pein
Trübsal

1)
Unheil
Katastrophe
Schicksalsschlag
Desaster
Verhängnis
(harter) Schlag
Heimsuchung
Elend
Tragik

2)
Verderben

3)
ins U. stürzen

4)
wie ein Häufchen U.->jämmerlich

1)
Armut
Elend
Not

2)
Katastrophe
Missgeschick
Unfall

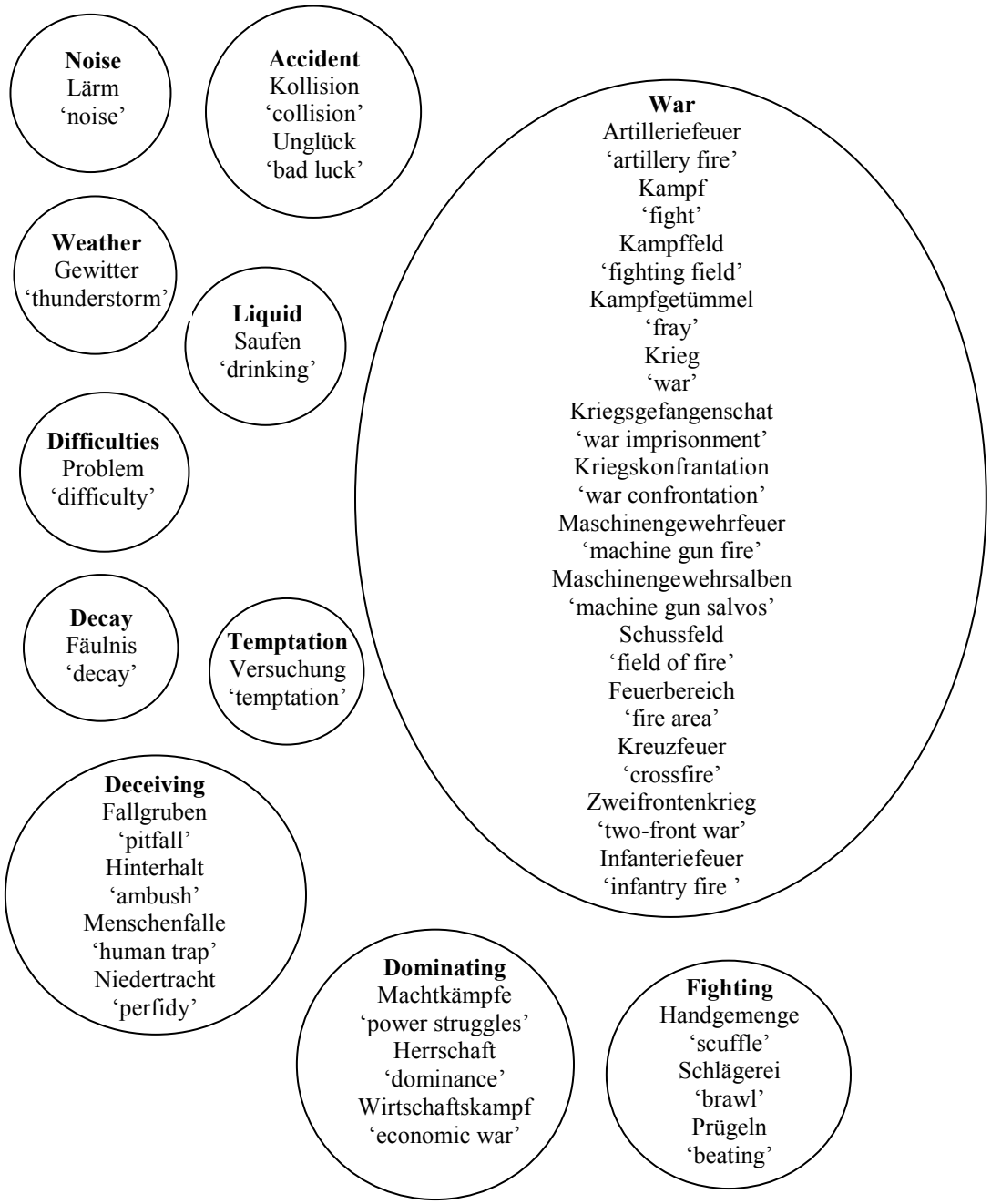
3)
Kummer
Leid
Verhängnis

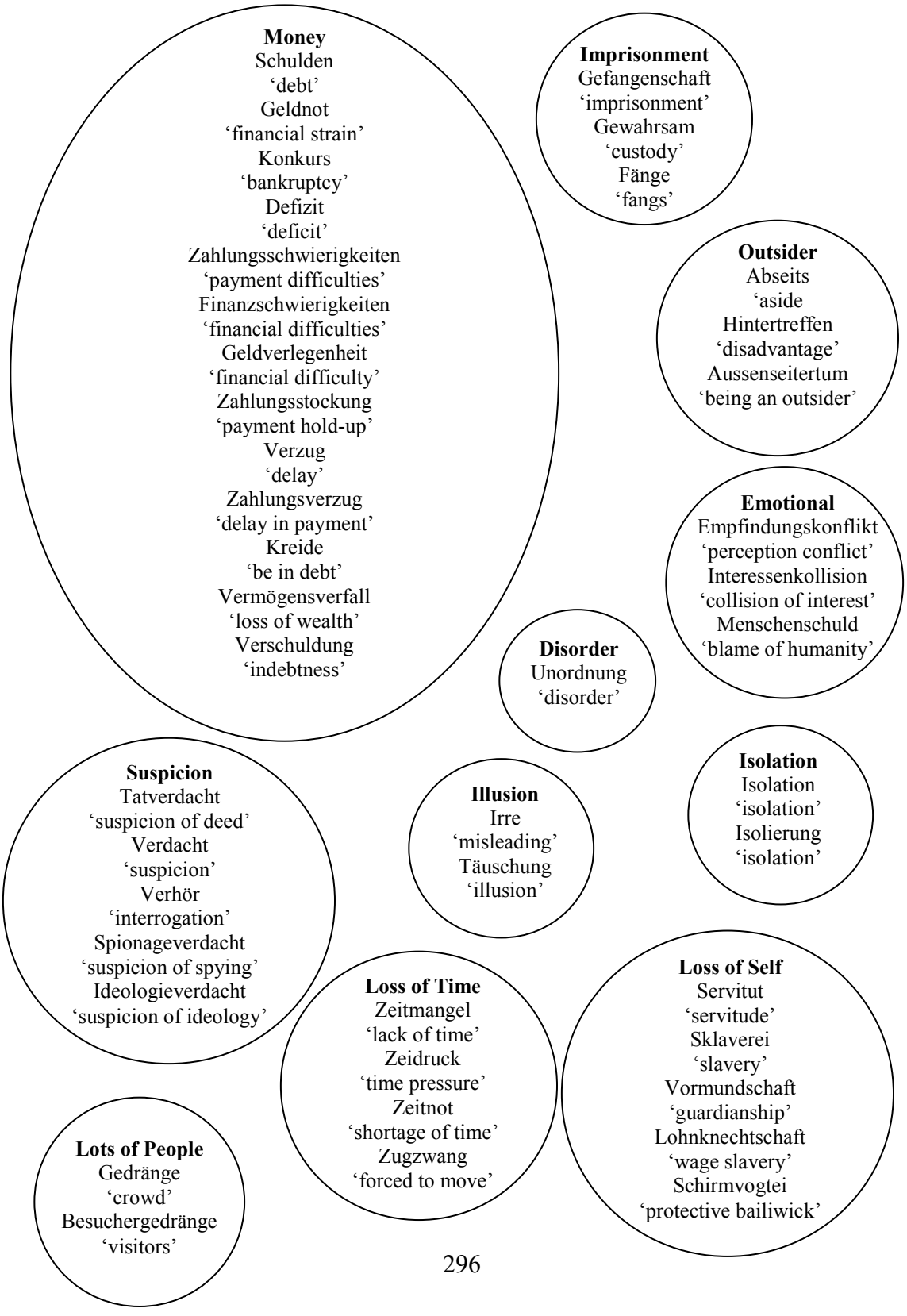
Verderben

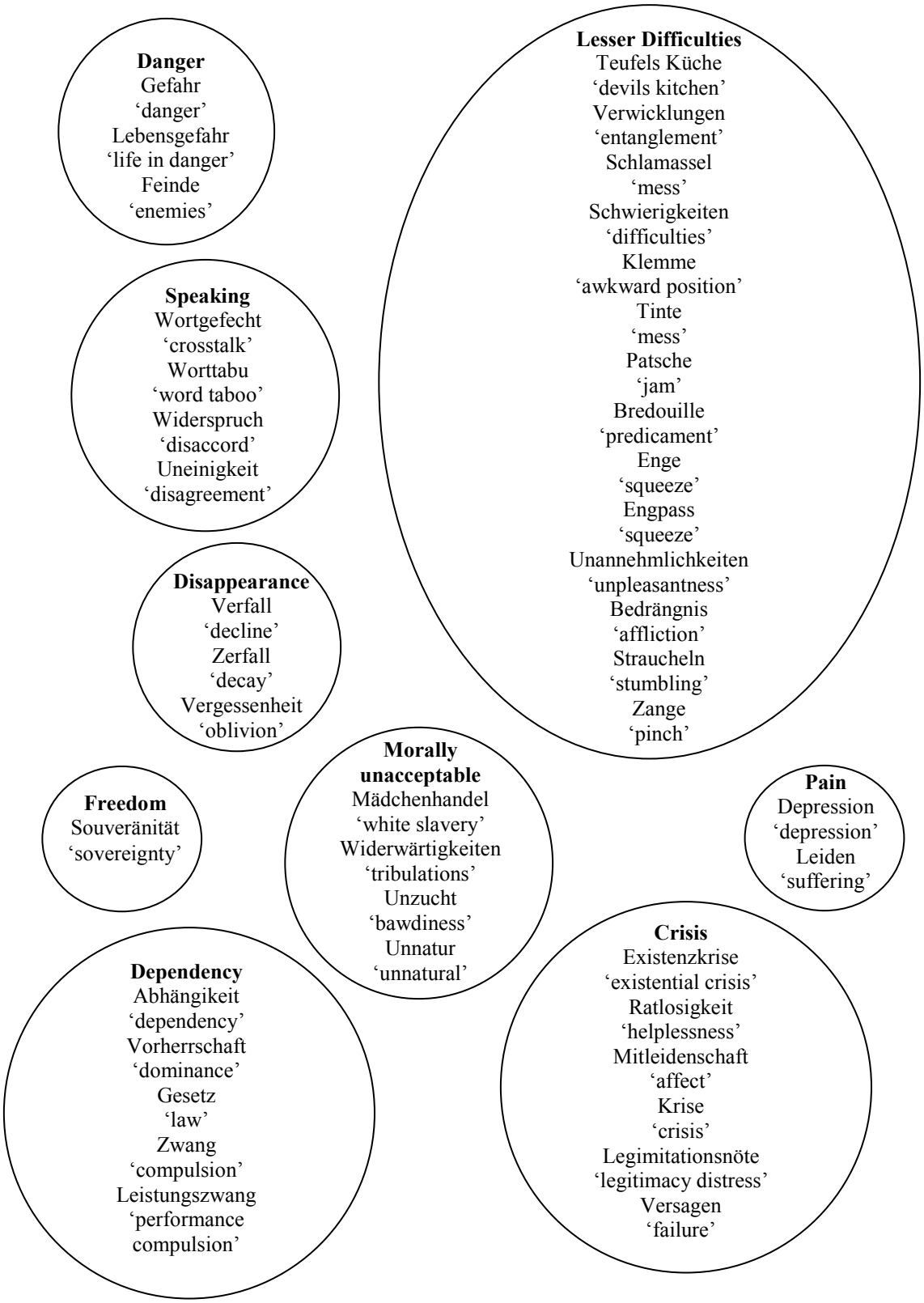
2b)
Katastrophe
Missgeschick
Pech
(Schicksals)schlag
Tragödie

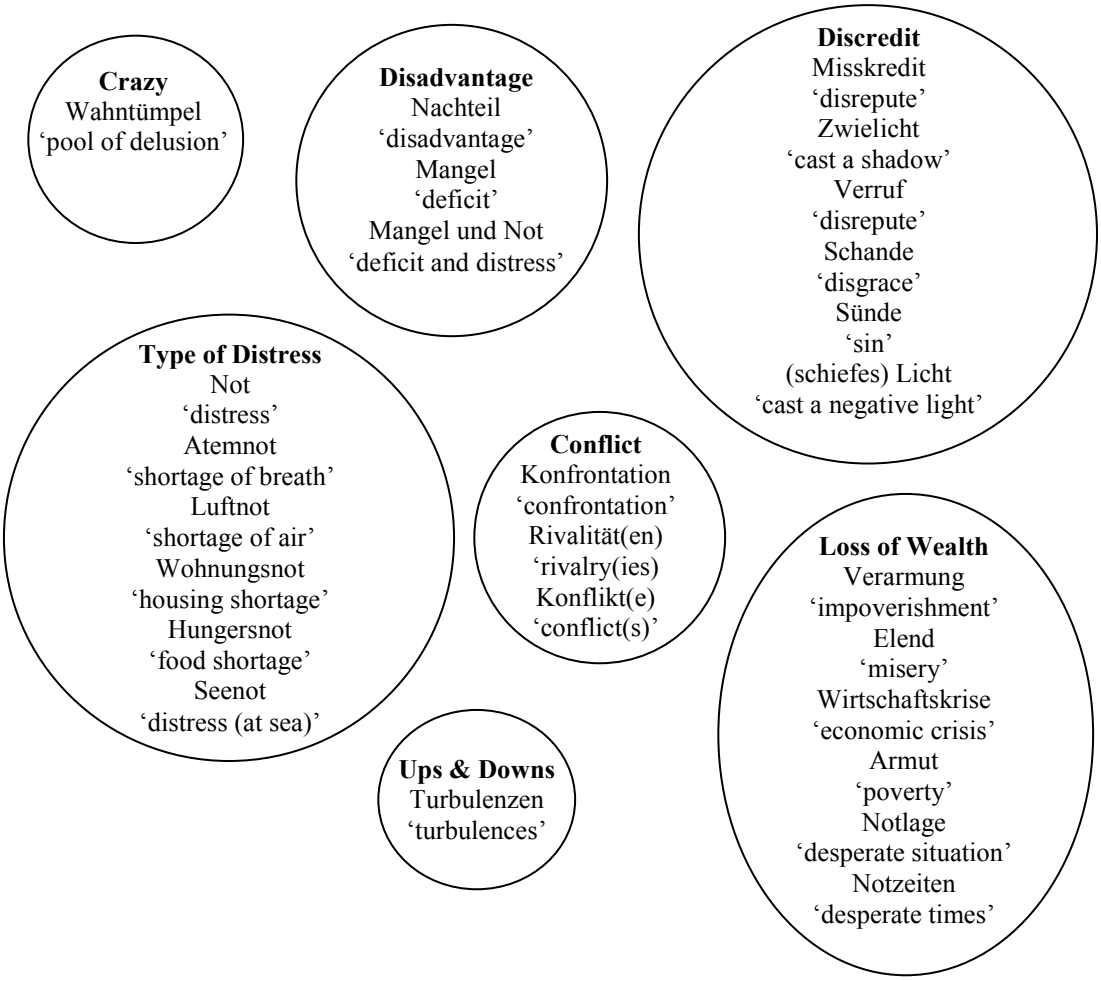
Appendix J

The following lists all semantic islands of situation NPs[tgt]




Money
Schulden
'debt'
Geldnot
'financial strain'
Konkurs
'bankruptcy'
Defizit
'deficit'
Zahlungsschwierigkeiten
'payment difficulties'
Finanzschwierigkeiten
'financial difficulties'
Geldverlegenheit
'financial difficulty'
Zahlungsstockung
'payment hold-up'
Verzug
'delay'
Zahlungsverzug
'delay in payment'
Kreide
'be in debt'
Vermögensverfall
'loss of wealth'
Verschuldung
'indebtness'
Imprisonment
Gefangenschaft
'imprisonment'
Gewahrsam
'custody'
Fänge
'fangs'
Outsider
Abseits
'aside
Hintertreffen
'disadvantage'
Aussenseitertum
'being an outsider'
Emotional
Empfindungskonflikt
'perception conflict'
Interessenkollision
'collision of interest'
Menschenschuld
'blame of humanity'
Disorder
Unordnung
'disorder'
Isolation
Isolation
'isolation'
Isolierung
'isolation'
Suspicion
Tatverdacht
'suspicion of deed'
Verdacht
'suspicion'
Verhör
'interrogation'
Spionageverdacht
'suspicion of spying'
Ideologieverdacht
'suspicion of ideology'
Illusion
Irre
'misleading'
Täuschung
'illusion'
Loss of Time
Zeitmangel
'lack of time'
Zeidruck
'time pressure'
Zeitnot
'shortage of time'
Zugzwang
'forced to move'
Loss of Self
Servitut
'servitude'
Sklaverei
'slavery'
Vormundschaft
'guardianship'
Lohnknechtschaft
'wage slavery'
Schirmvogtei
'protective bailiwick'
Lots of People
Gedränge
'crowd'
Besuchergedränge
'visitors'


Danger
Gefahr
'danger'
Lebensgefahr
'life in danger'
Feinde
'enemies'
Speaking
Wortgefecht
'crosstalk'
Worttabu
'word taboo'
Widerspruch
'disaccord'
Uneinigkeit
'disagreement'
Disappearance
Verfall
'decline'
Zerfall
'decay'
Vergessenheit
'oblivion'
Freedom
Souveränität
'sovereignty'
Dependency
Abhängikeit
'dependency'
Vorherrschaft
'dominance'
Gesetz
'law'
Zwang
'compulsion'
Leistungszwang
'performance compulsion'
Morally unacceptable
Mädchenhandel
'white slavery'
Widerwärtigkeiten
'tribulations'
Unzucht
'bawdiness'
Unnatur
'unnatural'
Lesser Difficulties
Teufels Küche
'devils kitchen'
Verwicklungen
'entanglement'
Schlamassel
'mess'
Schwierigkeiten
'difficulties'
Klemme
'awkward position'
Tinte
'mess'
Patsche
'jam'
Bredouille
'predicament'
Enge
'squeeze'
Engpass
'squeeze'
Unannehmlichkeiten
'unpleasantness'
Bedrängnis
'affliction'
Straucheln
'stumbling'
Zange
'pinch'
Pain
Depression
'depression'
Leiden
'suffering'
Crisis
Existenzkrise
'existential crisis'
Ratlosigkeit
'helplessness'
Mitleidenschaft
'affect'
Krise
'crisis'
Legimitationsnöte
'legitimacy distress'
Versagen
'failure'


Crazy
Wahntümpel
'pool of delusion'
Disadvantage
Nachteil
'disadvantage'
Mangel
'deficit'
Mangel und Not
'deficit and distress'
Discredit
Misskredit
'disrepute'
Zwielicht
'cast a shadow'
Verruf
'disrepute'
Schande
'disgrace'
Sünde
'sin'
(schiefes) Licht
'cast a negative light'
Type of Distress
Not
'distress'
Atemnot
'shortage of breath'
Luftnot
'shortage of air'
Wohnungsnot
'housing shortage'
Hungersnot
'food shortage'
Seenot
'distress (at sea)'
Conflict
Konfrontation
'confrontation'
Rivalität(en)
'rivalry(ies)
Konflikt(e)
'conflict(s)'
Loss of Wealth
Verarmung
'impoverishment'
Elend
'misery'
Wirtschaftskrise
'economic crisis'
Armut
'poverty'
Notlage
'desperate situation'
Notzeiten
'desperate times'
Ups & Downs
Turbulenzen
'turbulences'

Appendix K

Continuum Situation Nouns
SVCs with *geraten* encoding an unintentional change in situation

The following table lists possible noun substitutes for each of the nouns listed at the beginning of each row.

'Core nouns'	Possible noun substitutes
(K.1) Frozen; no substitute Target NPs	
a) in Gefahr	
b) in Isolierung	
c) in Schulden	
d) in Unordnung	
e) in Vergessenheit	
f) in Verzug	
g) in Verruf	
h) in Versuchung	
i) in Widerspruch	
(K.2) 1 substitute Target NP	
a) in Abhängigkeit	Hörigkeit
b) in Verdacht	Tatverdacht
c) in Gefangenschaft	Kriegsgefangenschaft

(K.3) 2 substitute Target NPs

a) in Armut	Elend	Not
b) ins Elend	Unglück	Armut

(K.4) 3 substitute Target NPs

a) inVerfall	Fäulnis	Verlust	Zerfall

(K.5) 6 substitute Target NPs

a) in Bedrängnis	Zeitnot Notlage	Bredouille	Dilemma	Krise Schwierigkeiten

Appendix L

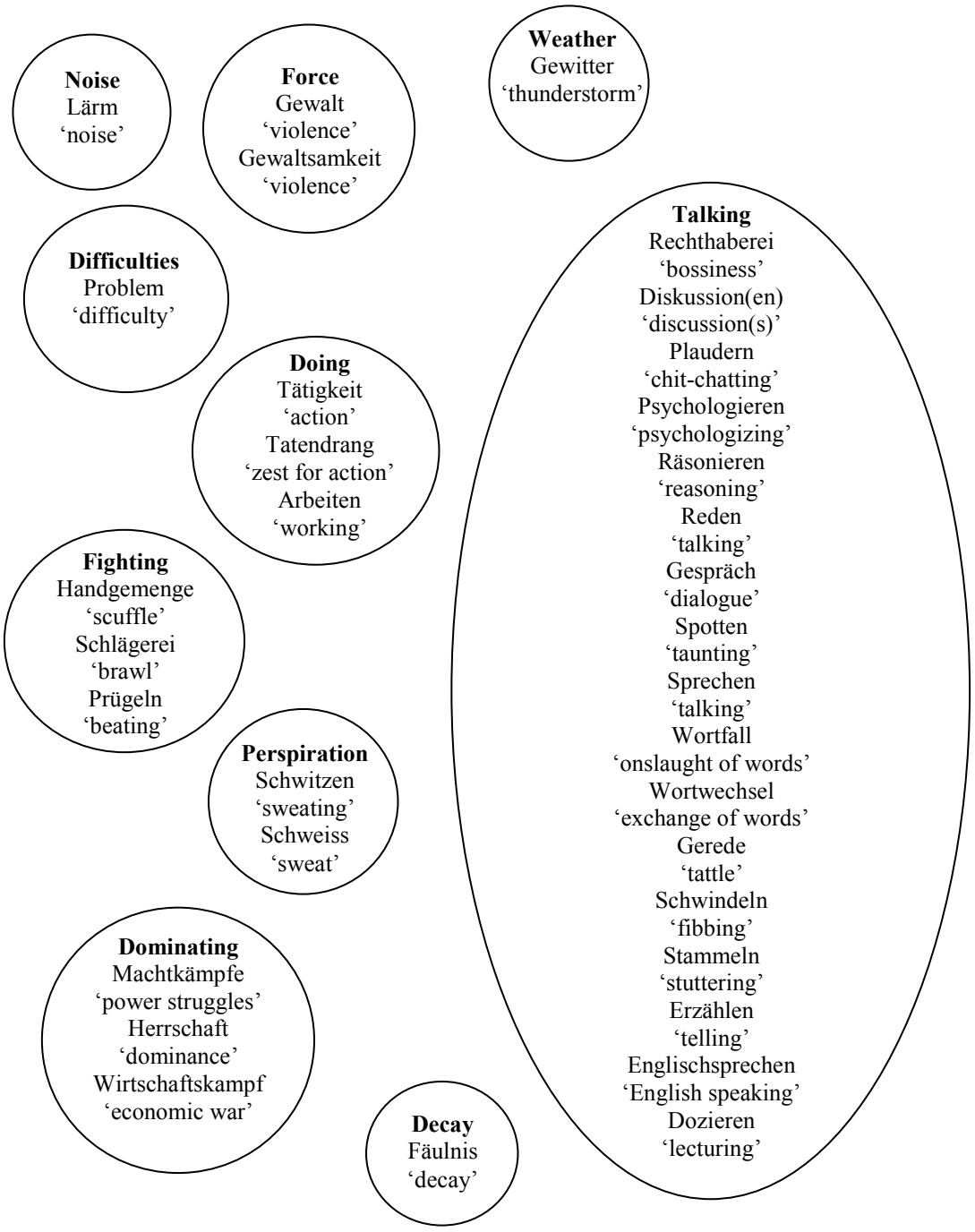
The following is a list of all synonyms, sub-meanings, and umbrella terms for *Bewegung* found in the *DWDS, Duden Synonym* dictionary, *Synonyme: Sinn- und sachverwandte Wörter* Dictonary, and the *Wörterbuch Synonyme*. Duplicate entries have been eliminated.

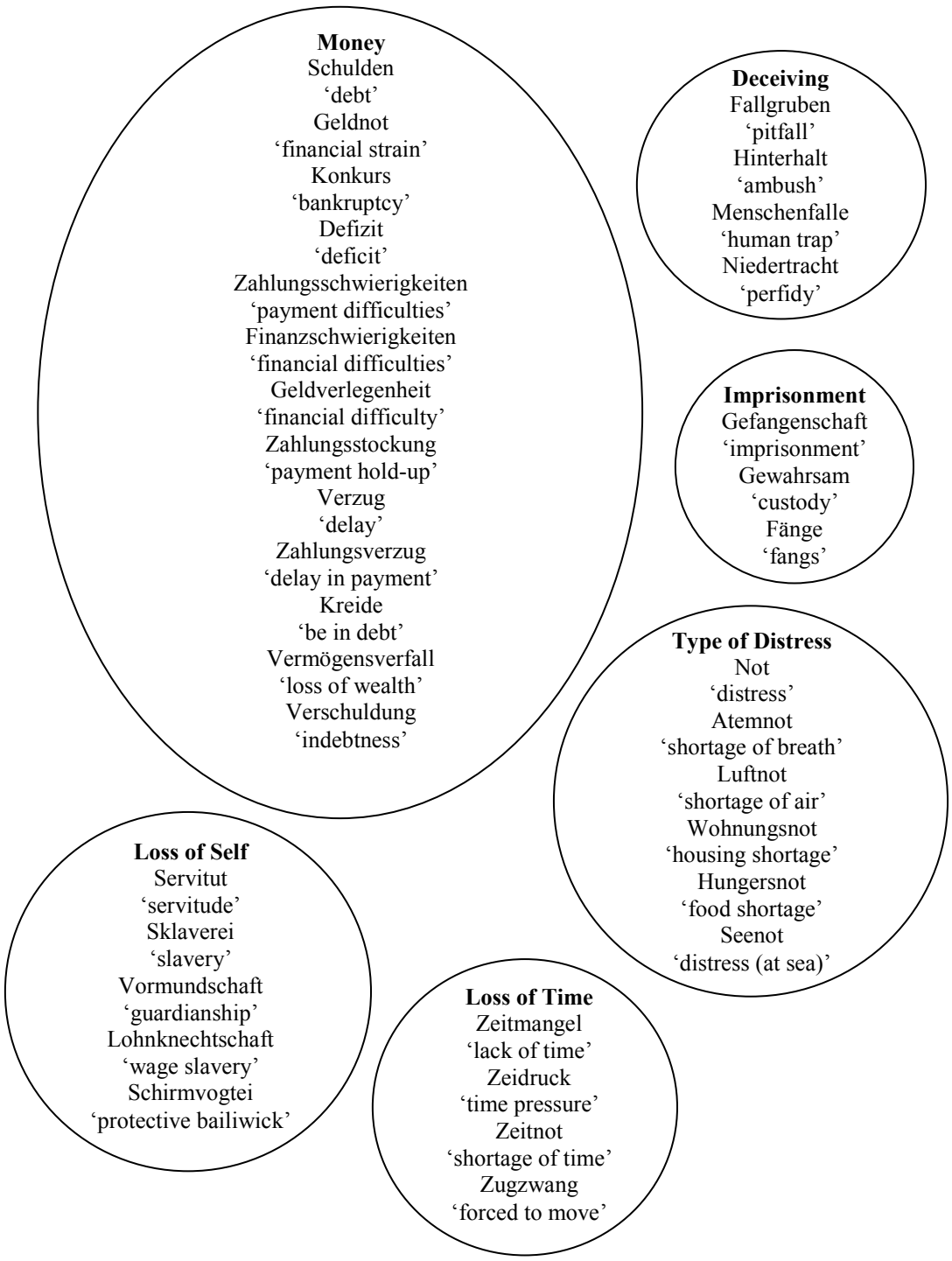
	Sub-meanings	Synonyms	Umbrella terms
Bewegung	Aktivistenbewegung	Auswaertsbewegung	Bestrebung
	Ausarbeitung	Befreiungsbewegung	Programm
	Beinschere	Betrieb	
	Dynamik	Partei	
	Erdrutsch	Einwaertsbegegung	
	Erschuetterung	Freiheitsbewegung	
	Fluegelschlag	Gang	
	Freimaurerei	Jugendbewegung	
	Friedensbewegung	Literaturstroemung	
	Gebaerde	Regung	
	Gelenk	Rhythmik	
	Gennossenschaftsbew	Runde	
	Geste	Vorwaertsbewegung	
	Gnosis	Schwingung	
	Gueterumlauf	Regung	
	Humanismus	Bewegtheit	
	Ionenwanderung	Ergriffenheit	
	Kreislauf	Erregung	
	Luftbad	Erschuetterung	
	Luftzug	Ruehrung	
	Manoever	Teilnahme	
	Molekularbewegung		
	Motorik		
	Parade		
	Pietismus		
	Purismus		
	Reflexbewegung		
	Regung		
	Reibung		
	Ruehrung		
	Schlenker		

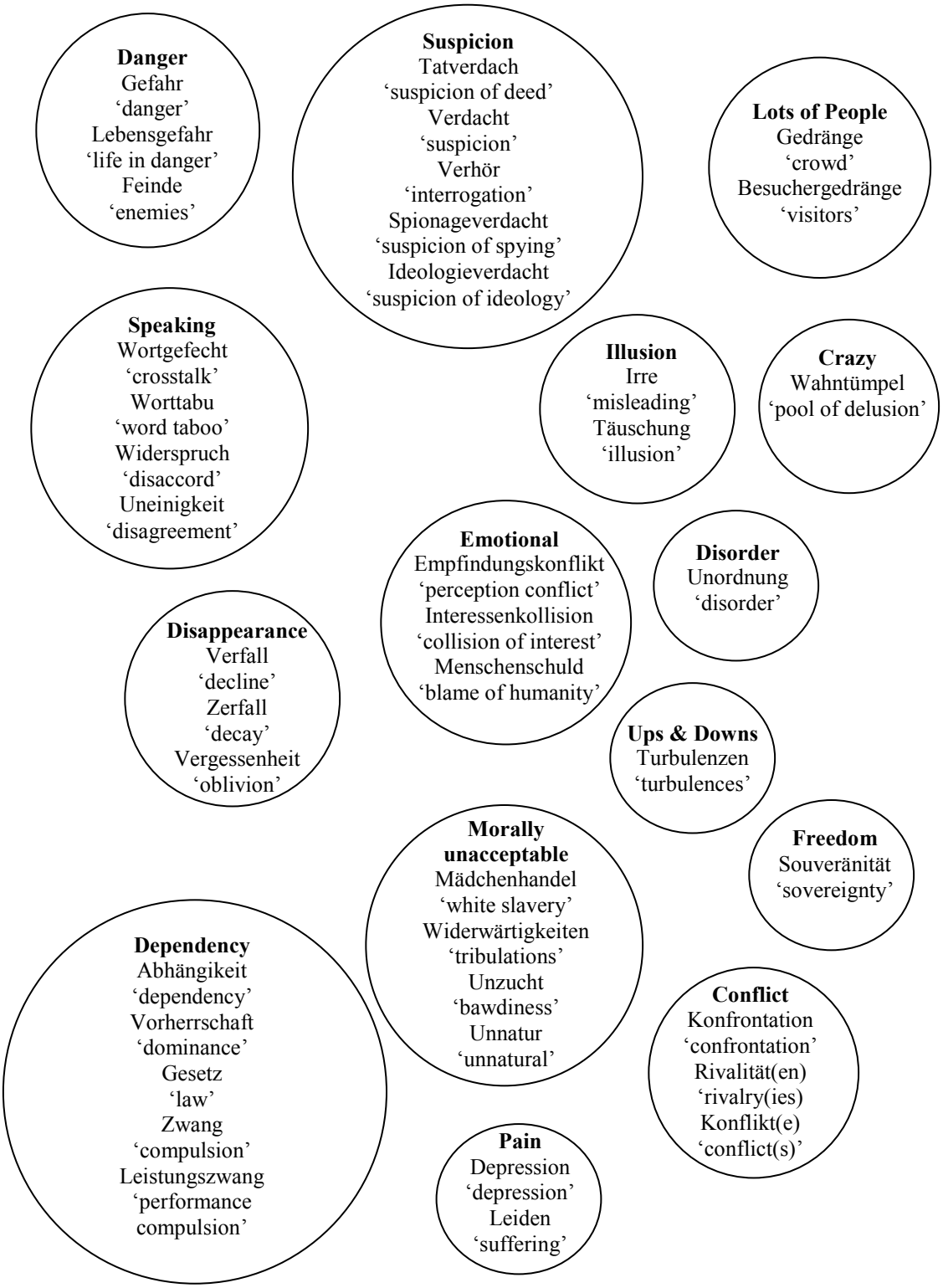
Schwingung
Schwung
Schwupp
Seegang
Spiel
Sprung
Stockung
Stoss
Stroemung
Taumel
Translation
Unruhe
Unterstroemung
Ventilation
Verkehr
Verkehrswesen
Wanderbewegung
Weltbewegung
Weltfrieden
Wetter
Windstoss
Windzug
Windung
Wirbel
Zuck

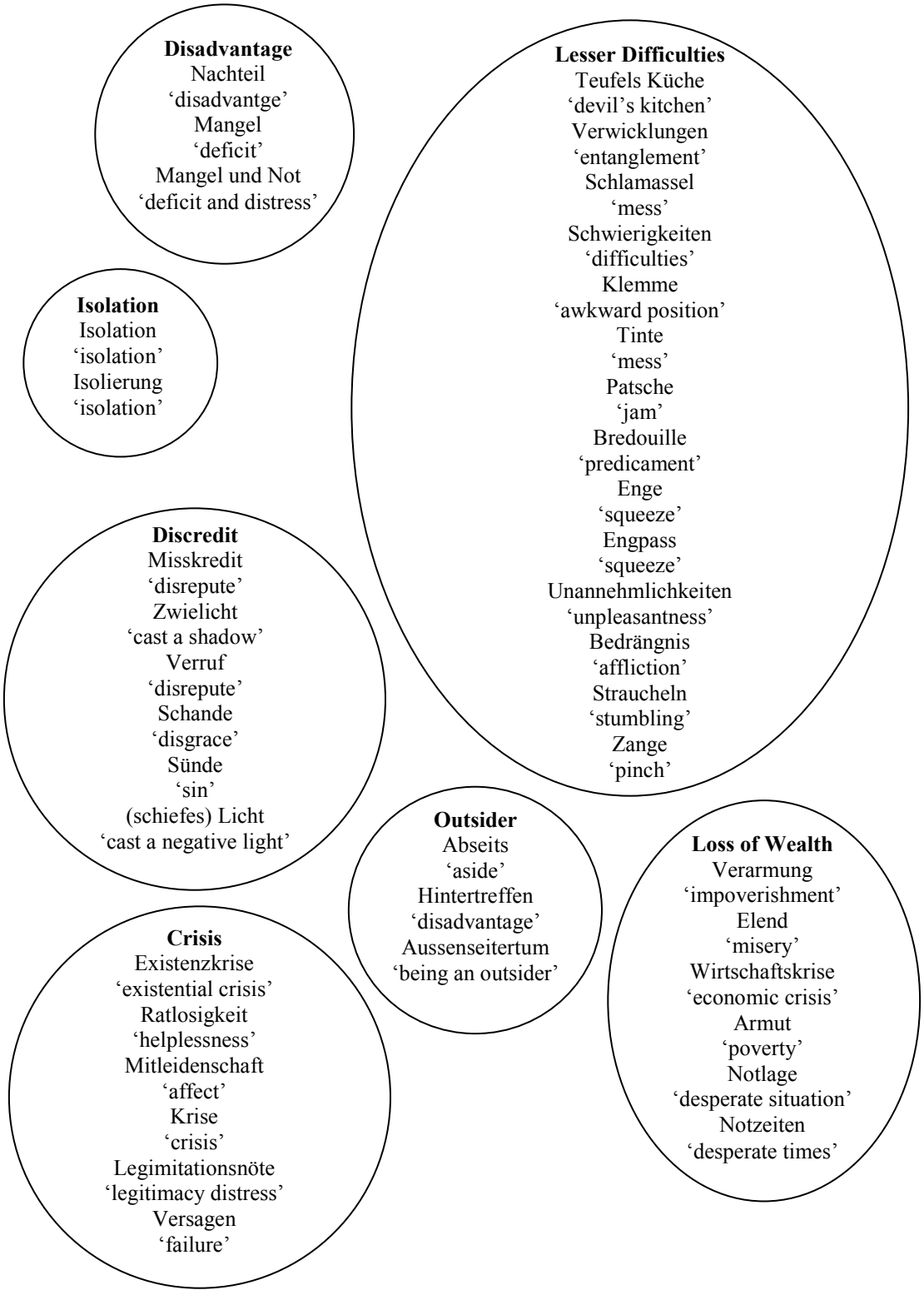
Appendix M

The following lists all semantic islands of onset NPs[tgt]




Money
Schulden
'debt'
Geldnot
'financial strain'
Konkurs
'bankruptcy'
Defizit
'deficit'
Zahlungsschwierigkeiten
'payment difficulties'
Finanzschwierigkeiten
'financial difficulties'
Geldverlegenheit
'financial difficulty'
Zahlungsstockung
'payment hold-up'
Verzug
'delay'
Zahlungsverzug
'delay in payment'
Kreide
'be in debt'
Vermögensverfall
'loss of wealth'
Verschuldung
'indebtness'
Deceiving
Fallgruben
'pitfall'
Hinterhalt
'ambush'
Menschenfalle
'human trap'
Niedertracht
'perfidy'
Imprisonment
Gefangenschaft
'imprisonment'
Gewahrsam
'custody'
Fänge
'fangs'
Type of Distress
Not
'distress'
Atemnot
'shortage of breath'
Luftnot
'shortage of air'
Wohnungsnot
'housing shortage'
Hungersnot
'food shortage'
Seenot
'distress (at sea)'
Loss of Self
Servitut
'servitude'
Sklaverei
'slavery'
Vormundschaft
'guardianship'
Lohnknechtschaft
'wage slavery'
Schirmvogtei
'protective bailiwick'
Loss of Time
Zeitmangel
'lack of time'
Zeidruck
'time pressure'
Zeitnot
'shortage of time'
Zugzwang
'forced to move'


Danger
Gefahr
'danger'
Lebensgefahr
'life in danger'
Feinde
'enemies'
Suspicion
Tatverdach
'suspicion of deed'
Verdacht
'suspicion'
Verhör
'interrogation'
Spionageverdacht
'suspicion of spying'
Ideologieverdacht
'suspicion of ideology'
Lots of People
Gedränge
'crowd'
Besuchergedränge
'visitors'
Speaking
Wortgefecht
'crosstalk'
Worttabu
'word taboo'
Widerspruch
'disaccord'
Uneinigkeit
'disagreement'
Illusion
Irre
'misleading'
Täuschung
'illusion'
Crazy
Wahntümpel
'pool of delusion'
Emotional
Empfindungskonflikt
'perception conflict'
Interessenkollision
'collision of interest'
Menschenschuld
'blame of humanity'
Disorder
Unordnung
'disorder'
Disappearance
Verfall
'decline'
Zerfall
'decay'
Vergessenheit
'oblivion'
Ups & Downs
Turbulenzen
'turbulences'
Morally unacceptable
Mädchenhandel
'white slavery'
Widerwärtigkeiten
'tribulations'
Unzucht
'bawdiness'
Unnatur
'unnatural'
Freedom
Souveränität
'sovereignty'
Dependency
Abhängikeit
'dependency'
Vorherrschaft
'dominance'
Gesetz
'law'
Zwang
'compulsion'
Leistungszwang
'performance compulsion'
Conflict
Konfrontation
'confrontation'
Rivalität(en)
'rivalry(ies)
Konflikt(e)
'conflict(s)'
Pain
Depression
'depression'
Leiden
'suffering'


Disadvantage
Nachteil
'disadvantge'
Mangel
'deficit'
Mangel und Not
'deficit and distress'
Isolation
Isolation
'isolation'
Isolierung
'isolation'
Discredit
Misskredit
'disrepute'
Zwielicht
'cast a shadow'
Verruf
'disrepute'
Schande
'disgrace'
Sünde
'sin'
(schiefes) Licht
'cast a negative light'
Crisis
Existenzkrise
'existential crisis'
Ratlosigkeit
'helplessness'
Mitleidenschaft
'affect'
Krise
'crisis'
Legimitationsnöte
'legitimacy distress'
Versagen
'failure'
Lesser Difficulties
Teufels Küche
'devil's kitchen'
Verwicklungen
'entanglement'
Schlamassel
'mess'
Schwierigkeiten
'difficulties'
Klemme
'awkward position'
Tinte
'mess'
Patsche
'jam'
Bredouille
'predicament'
Enge
'squeeze'
Engpass
'squeeze'
Unannehmlichkeiten
'unpleasantness'
Bedrängnis
'affliction'
Straucheln
'stumbling'
Zange
'pinch'
Outsider
Abseits
'aside'
Hintertreffen
'disadvantage'
Aussenseitertum
'being an outsider'
Loss of Wealth
Verarmung
'impoverishment'
Elend
'misery'
Wirtschaftskrise
'economic crisis'
Armut
'poverty'
Notlage
'desperate situation'
Notzeiten
'desperate times'

Appendix N

Continuum Onset Nouns
SVCs with *geraten* encoding an unintentional change in onset

The following table lists possible noun substitutes for each of the nouns listed at the beginning of each row.

'Core nouns'	Possible noun substitutes

(N.1) Frozen; no substitute Target NPs

a) in Brand

b) ins Flackern

c) ins Gerede

d) ins Nachdenken

e) ins Rollen

f) ins Schwitzen

g) ins Schwanken

h) ins Schleudern

i) ins Staunen

j) ins Stocken

k) ins Stutzen

l) unter Verschluss

m) ins Wanken

(N.2) 1-2 substitute Target NPs

a) unter Druck	Umstände	
b) in Aufruhr	Taumel	Wallung

(N.3) 4 substitute Target NPs

a) in eine Diskussion	Auseinandersezung		Debatte	Gespräch
	Kontroverse			

(N.4) 6-10 substitute Target NPs

a) in Bewegung	Gang	Reibung	Schwingung	Schwung
	Stockung	Taumel	Wirbel	
b) in Kontroverse	Zwist	Streit	Auseinandersetzung	
	Debatte	Diskussion	Streitigkeit	
	Meinungsverschiedenheit		Wortwechsel	
c) in Streit	Streitigkeit	Auseinandersetzung		Gefecht
	Kontroverse	Wortwechsel	Zwist	Reibung
	Zwistigkeit	Meinungsverschiedenheit		

Appendix O

O.1 Frame description of `Being_at_risk` frame

Being_at_risk

Lexical Unit Index

Definition:

An Asset is in a state where it is exposed to or otherwise liable to be affected by a Harmful_event, which may be metonymically evoked by reference to a Dangerous_entity. Words expressing relative safety (i.e., lack of risk) are also in this frame.

If you are a farmer, you *are at* RISK for hearing loss caused by noise exposure in your work.

No child *is* SECURE from the temptation to do what "my friends" are doing.

Our nation is making a disastrous mistake thinking that we can *have* SECURITY from people: There is only security with people.

You don't *have* SECURITY against impersonation unless you have security against eavesdropping.

FEs:

Core:

Asset [ass]	Something judged to be desirable or valuable which might be lost or damaged. There is a locked padlock that guarantees the information is SECURE.
Dangerous_entity [dan]	A concrete or abstract entity which may come to cause the loss of, or damage to the Asset either due to its participation in a Harmful_event. We make sure your BMW is SECURE against intruders.
Harmful_event [har] **Excludes:** Dangerous_entity	An action that may occur or a state which may hold which could result in the loss of or damage to the Asset. Our system ensures that information stored within hardware is SECURE from external software attack and physical theft.

Non-Core:

Degree [deg]
Semantic Type: Degree
A modifier expressing the deviation of the actual level of security from the expected value given the Asset and the state indicated by the target itself.
My mail is totally SECURE in this box.

Depictive []
This FE describes a participant of the state of affairs introduced by the target as being in some state during the action.

Domain [dom]
The Domain in which the Asset has a degree of safety.
Students with Asthma need to *be* medically SAFE at school.

Duration []
Duration denotes the length of time from the beginning of a continuous situation (the one denoted by the target) to its end. In many cases, the continuous situation is a dynamic action which is ongoing, while in others it is simply an undifferentiated state.

Explanation [exp]
Semantic Type: State_of_affairs
The Explanation denotes a proposition from which the state of security or insecurity of the Asset logically follows.

Frequency []
This frame element is defined as the number of times an event occurs per some unit of time. A Frequency expression answers the question how often.

Place [pla]
Semantic Type: Locative_relation
A particular location in which the Asset is secure. Frequently, it is to be inferred that the characteristics of the location protect the Asset from a potential Harmful_event.
Workers need to make sure their property is SECURE at work.

Situation [sit]
The Situation under which the Asset is safe or unsafe.
Our children are SAFE with that criminal behind bars.
Most expressions of Time and Place also express the Situation and should be labeled as such on the 2nd FE layer.

Time [tim]
Semantic Type: Time
The time period during which the Asset enjoys the specified level of security from a Harmful_event.
Israel is INSECURE today not because it does not have enough military power.

FE Core set(s):

{Dangerous_entity, Harmful_event}

Frame-frame Relations:

Inherits from: Gradable_attributes
Is Inherited by:
Perspective on: Risk_scenario
Is Perspectivized in:
Uses:
Is Used by:
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also: Run_risk

Lexical Units:

danger.n, insecure.a, risk.n, safe.a, safety.n, secure.a, security.n, unsafe.a, vulnerability.n, vulnerable.a

Created by 605 on 07/14/2005 11:02:42 PDT Thu

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
danger.n	**Created**	Lexical entry		618	08/21/2006 10:47:51 PDT Mon
insecure.a	**Created**	Lexical entry		605	07/14/2005 12:44:00 PDT Thu
risk.n	**Created**	Lexical entry	Annotation	618	07/21/2006 06:31:44 PDT Fri

O.2 Frame description of `Creating` frame

Creating

Lexical Unit Index

Definition:

A Cause leads to the formation of a Created_entity.

FEs:

Core:

Created_entity [CrEnt]	This FE identifies the entity that the Agent intentionally creates. They were ASSEMBLING grenades for export.
Creator [cre]	The Creator creates a created entity.

Core Unexpressed:

Cause [Cause] **Excludes:** Creator	An animate or inanimate entity, a force, or event that produces an effect. Volitionality is not a necessary characteristic of Causes.

Non-Core:

Beneficiary [ben]	The Beneficiary benefits in some way from the creation of the Created_entity.
Circumstances []	Circumstances describe the state of the world (at a particular time and place) which is specifically independent of the event itself and any of its participants.
Co_participant [cop]	A secondary agent with whom the Creator intentionally creates the Created_entity.
Components [Cmpnt]	This FE identifies the Components that are attached together to form a Created_entity. The force of the rock above FORMED diamond out of the carbon.

Depictive [Depict]	This FE identifies a depictive phrase describing the actor or undergoer of an action. We WANDERED around naked. Cicadas SCREECH unseen from within.
Frequency []	This frame element is defined as the number of times an event occurs per some unit of time.
Instrument [ins]	This FE identifies the instrument with which an Agent intentionally creates a Created_entitiy.
Manner [Manr] **Semantic Type:** Manner	This FE identifies the Manner in which a Creator intentionally creates a new entity.
Means [Mns] **Semantic Type:** State_of_affairs	This FE identifies the Means by which a Creator intentionally creates a new entity.
Period of iterations []	The length of time from when the event denoted by the target began to be repeated to when it stopped.
Place [Place] **Semantic Type:** Locative_relation	This FE identifies the place ehere the Agent intentionally creates the new entity.
Purpose [pur] **Semantic Type:** State_of_affairs	This FE identifies the purpose for which the Creator intentionally creates a new entity.
Purpose_of_created_entity [pur_ent]	The Creator's intended purpose for the Created_entity.
Role [rol]	The Role that the Created_entity takes (or is intended to take, if there is a Creator).
Time [Time] **Semantic Type:** Time	This FE identifes the Time when an Agent intentionally creates a new entity.

Frame-frame Relations:

Inherits from: Transitive_action
Is Inherited by: Intentionally_create
Perspective on:
Is Perspectivized in:
Uses:
Is Used by: Ingredients
Subframe of:

Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also:

Lexical Units:

assemble.v, create.v, form.v, formation.n, generate.v, issuance.n, issue.v, produce.v, production.n, yield.v

Created by 664 on 05/10/2002 12:28:39 PDT Fri

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
assemble.v	**Created**	Lexical entry		303	11/23/2004 05:08:54 PST Tue
create.v	**Finished_Initial**	Lexical entry	Annotation	303	11/23/2004 05:01:02 PST Tue
form.v	**Created**	Lexical entry		303	11/23/2004 05:04:23 PST Tue
formation.n	**Created**	Lexical entry		664	03/03/2005 10:21:21 PST Thu
generate.v	**Finished_Initial**	Lexical entry	Annotation	618	07/26/2005 02:27:02 PDT Tue
issuance.n	**Created**	Lexical entry		361	03/30/2007 10:06:22 PDT Fri
issue.v	**Created**	Lexical entry		361	03/30/2007 10:05:28 PDT Fri
produce.v	**Created**	Lexical entry		605	03/03/2005 10:33:46 PST Thu
production.n	**Created**	Lexical entry		605	03/03/2005 11:26:06 PST Thu
yield.v	**Finished_Initial**	Lexical entry	Annotation	303	08/09/2006 01:44:42 PDT

O.3 Frame description of `Destroying` frame

Destroying

Lexical Unit Index

Definition:

A Destroyer (a conscious entity) or Cause (an event, or an entity involved in such an event) affects the Undergoer negatively so that the Undergoer no longer exists.

FEs:

Core:

Cause [Cause] **Excludes:** Destroyer	The event or entity which is responsible for the destruction of the Undergoer. The subsequent explosions LEVELED most downtown office buildings. Tornados VAPORIZED this town a few decades back.
Destroyer [Agt] **Semantic Type:** Sentient	The conscious entity, generally a person, that performs the intentional action that results in the Undergoer's destruction. Who can UNMAKE the ring?
Undergoer [Und]	The entity which is destroyed by the Destroyer. Who can UNMAKE the ring?

Non-Core:

Containing_event [Con]	This FE denotes an event that occurs or state of affairs that holds at a time that includes the time during which the event or state of affairs reported by the target occurs and of which it is taken to be a part.
Degree [Degr] **Semantic Type:** Degree	The degree to which the destruction is completed. I DESTROYED all signs of our presence completely.

Depictive [Dep]

This FE describes a participant of the state of affairs introduced by the target as being in some state during the action.

Explanation [Exp]

The Explanation denotes a proposition from which the main clause (headed by the target) logically follows. This often means that the Explanation causes the target's proposition, but not in all cases.

Frequency [Fre]

How often the Cause or Destroyer destroys the Undergoer.

Instrument [Ins]
Semantic Type: Physical_entity

An entity directed by the Destroyer that interacts with an Undergoer to accomplish the Undergoer's destruction.

Manner [Mnr]
Semantic Type: Manner

Any description of the process of destruction which is not covered by more specific FEs, including epistemic modification (probably, presumably, mysteriously), secondary effects (quietly, loudly), and general descriptions comparing events (the same way). It may also indicate salient characteristics of the Destroyer that also affect the action (presumptuously, coldly, deliberately, eagerly, carefully).

Means [Mns]
Semantic Type: State_of_affairs

An intentional action performed by the Destroyer that accomplishes the destruction.

> Samptu OBLITERATED the land of Abde with a great flood, leaving only the sea.

Place [Place]
Semantic Type: Locative_relation

This FE identifies the place where the Destroyer destroys the Undergoer.

Purpose [Purp]
Semantic Type: State_of_affairs

This FE identifies the purpose for which an Destroyer causes the destruction of the Undergoer.

> We LAID WASTE to Hattusas to subjugate them, not to vex them.

Reason [Reason]
Semantic Type: State_of_affairs

A state of affairs that the Destroyer is responding to in destroying the Undergoer.

> He RAZED the goddess's temple out of sheer anger.

Result [Result]

This FE identifies the Result of an event on the Undergoer. This FE is very rare in this frame, and since the Undergoeris destroyed by this process, the Result is generally constrained to indicate the Undergoer's resulting inexistence.

> All of the buildings had been RAZED to nothing.

Role [Rol]	The category in which the Undergoer is destroyed.
Subregion [Subr] **Semantic Type:** Locative_relation	The part of the Undergoer which is directly affected by the destruction. The village was DEVASTATED from the north end to the banks of the Neva.
Time [Time] **Semantic Type:** Time	This FE identifies the time when the Destroyer destroys the Undergoer.

Frame-frame Relations:

Inherits from: Transitive_action
Is Inherited by:
Perspective on:
Is Perspectivized in:
Uses:
Is Used by: Cause_to_fragment
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also:

Lexical Units:

annihilate.v, annihilation.n, blow up.v, demolish.v, demolition.n, destroy.v, destruction.n, destructive.a, devastate.v, devastation.n, dismantle.v, dismantlement.n, lay_waste.v, level.v, obliterate.v, obliteration.n, raze.v, unmake.v, vaporize.v

Created by 664 on 10/21/2002 05:08:16 PDT Mon

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
annihilate.v	**Finished_Initial**	Lexical	Annotation	664	10/24/2002

O.4 Frame description of `Emotion_directed` frame

Emotion_directed

Lexical Unit Index

Definition:

The adjectives and nouns in this frame describe an Experiencer who is feeling or experiencing a particular emotional response to a Stimulus or about a Topic. There can also be a Circumstances under which the response occurs or a Reason that the Stimulus evokes the particular response in the Experiencer.

Mr. Whiskers is UPSET that there are no more cat treats.

The FURIOUS parent stormed into the office.

Franz gets INFURIATED at the thought of his ex-wife remarried.

She flashed a JUBILANT smile.

FEs:

Core:

Event [Event]
Semantic Type: State_of_affairs
Excludes: Expressor

The Event is the occasion or happening that Experiencers in a certain emotional state participate in.

The end of the film was filled with JUBILANT scenes.
[Here we know that the scenes are filled with jubilant Experiencers.]

Experiencer [Exp]
Semantic Type: Sentient
Excludes: Event

The Experiencer is the person or sentient entity that experiences or feels the emotions.

Nan Ho turned, his extreme AGITATION unnoticed by the Prince.

Expressor [Exr]
Excludes: Experiencer

The Frame Element Expressor marks expressions that indicate a body part, gesture or other expression of the Experiencer that reflects his or her emotional state. They describe a presentation of the experience or emotion denoted by the adjective or noun.

"Can I help you?" she asked, trying not to let him see the AMUSEMENT in her blue eyes.

State [State]

The State is the abstract noun that describes a more lasting experience by the Experiencer.

Tracy was in an IRRITATED mood.

Stimulus [Stim]

The Stimulus is the person, event, or state of affairs that evokes the emotional response in the Experiencer.

Liz's ANGER towards Raquel dates back to a charity dinner this year.

The feeling the bereaved find most difficult to acknowledge is their ANGER against the dead person for abandoning them to face the world alone.

Jack Smith openly discussed his innermost ANGUISH at being one of only three England players not to kick a ball during finals.

David filled her dreams; the ecstasy of their lovemaking, and the pain and BEWILDERMENT of his abrupt departure.

Topic [Top]

The Topic is the general area in which the emotion occurs. It indicates a range of possible Stimulus.

I was ANGRY about the war.

So tell the world, and its BOREDOM about your troubles will heal you.

Non-Core:

Circumstances [cir]

The Circumstances is the condition(s) under which the Stimulus evokes its response. In some cases it may appear without an explicit Stimulus.

One career wife spoke about her EXASPERATION when her husband listened to her with half an ear as he watched television.

Bob is INFURIATED whenever I play loud music.

Degree [Degr] **Semantic Type:** Degree	The Degree is the degree to which the Experiencer feels the emotion. Nan Ho turned, his extreme AGITATION unnoticed by the Prince .
Empathy_target [ET]	The Empathy_target is the individual or individuals with which the Experiencer identifies emotionally and thus shares their emotional response. I am HAPPY for Sara.
Frequency []	
Manner [] **Semantic Type:** Manner	The Manner is the way in which the Experiencer experiences the Stimulus.
Parameter []	The Parameter is a domain in which the Experiencer experiences the Stimulus.
Reason [Reas] **Semantic Type:** State_of_affairs	The Reason is the explanation for why the Stimulus evokes a certain emotional response. The feeling the bereaved find most difficult to acknowledge is their ANGER against the dead person for abandoning them to face the world alone.

FE Core set(s):

{Stimulus, Topic}, {Experiencer, Expressor, State}

Frame-frame Relations:

Inherits from:
Is Inherited by:
Perspective on:
Is Perspectivized in:
Uses: Emotions
Is Used by:
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:

Is Causative of:
See also:

Lexical Units:

abashed.a, affronted.a, agitated.a, agitation.n, agonized.a, agony.n, alarmed.a, all about.prep, amused.a, amusement.n, anger.n, angry.a, anguish.n, anguished.a, annoyance.n, annoyed.a, anxious.a, appalled.a, ashamed.a, astonished.a, astonishment.n, astounded.a, baffled.a, bafflement.n, befuddled.a, bewildered.a, bewilderment.n, blue.a, bored.a, boredom.n, chagrin.n, chagrined.a, concern.n, concerned.a, contented.a, covetous.a, crestfallen.a, cross.a, crushed.a, dejected.a, dejection.n, delight.n, delighted.a, demolished.a, depressed.a, desolate.a, despair.n, despondency.n, despondent.a, devastated.a, disappointed.a, disappointment.n, discomfited.a, discomfiture.n, disconcerted.a, disconcertion.n, disconsolate.a, discouraged.a, discouragement.n, disgruntled.a, disgruntlement.n, disheartened.a, dismay.n, dismayed.a, disorientation.n, disoriented.a, displeased.a, displeasure.n, disquiet.n, disquieted.a, distress.n, distressed.a, downcast.a, downhearted.a, ecstatic.a, elated.a, elation.n, embarrassed.a, embarrassment.n, embittered.a, enraged.a, exasperated.a, exasperation.n, excited.a, excitement.n, exhilarated.a, exhilaration.n, fascinated.a, fed up.a, fed-up.a, flabbergasted.a, flummoxed.a, flustered.a, frightened.a, furious.a, fury.n, glee.n, gleeful.a, glum.a, glumness.n, gratification.n, gratified.a, grief-stricken.a, grief.n, happy.a, harried.a, heartbreak.n, heartbroken.a, horrified.a, horror.n, humiliated.a, incensed.a, inconsolable.a, indignant.a, infuriated.a, interest.n, irate.a, irked.a, irritated.a, jubilant.a, livid.a, low-spirited.a, lugubrious.a, mad.a, miffed.a, miserable.a, mortification.n, mortified.a, mournful.a, mourning.n, mystification.n, mystified.a, nervous.a, nettled.a, nonplussed.a, offended.a, outrage.n, overjoyed.a, overwrought.a, peeved.a, perplexed.a, perplexity.n, perturbed.a, petrified.a, pleased.a, puzzlement.n, rattled.a, relaxed.a, resentful.a, revolted.a, revulsion.n, riled.a, ruffled.a, sad.a, saddened.a, sadness.n, shocked.a, sickened.a, sore.a, sorrow.n, sorrowful.a, startled.a, stressed.a, stunned.a, stupefaction.n, stupefied.a, sympathetic.a, sympathize.v, sympathy.n, terror-stricken.a, thrilled.a, tormented.a, traumatised.a, unsettled.a, unsympathetic.a, upset.a, vexation.n, vexed.a, woebegone.a, worried.a, wretched.a

Created by 731 on 02/07/2001 04:12:06 PST Wed

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
abashed.a	**Finished_Initial**	Lexical entry	Annotation	296	08/08/2002 02:48:43 PDT Thu
affronted.a	**Finished_Initial**	Lexical entry	Annotation	296	08/08/2002 04:28:52 PDT Thu

O.5 Frame description of `Hostile_encounter` frame

Hostile_encounter

Lexical Unit Index

Definition:

This frame consists of words that describe a hostile encounter between opposing forces (Side_1 and Side_2, collectively conceptualizable as Sides) over a disputed Issue and/or in order to reach a specific Purpose.

FEs:

Core:

Issue [Iss]	An unresolved question over which the two sides of a hostile encounter are in disagreement. They had a DUST-UP over who was prettier . Quite often it takes the form of a covert question of various sorts. So in an example like: They FOUGHT over the right to own land. among many other possibilities, the covert question might be more explicitly phrased as follows: They FOUGHT over what the right to own land means.
Purpose [Purpose] **Semantic Type:** State_of_affairs	The desired result of the outcome of the hostile encounter for the Side_1 or for all the Sides collectively. It may either directly refer to the state of affairs that is desired, e.g. He DUELED with his former second to defend the honour of the man he had killed . or it the state of affairs may be implicit in an (abstract or concrete) entity that they desire, e.g. Rival Democratic presidential candidates Mr Bill Clinton and Mr Jerry Brown taunted each other at the weekend as mudslinging in the BATTLE for votes in tomorrow's crucial New York primary reached a new low.
Side_1 [Side-1] **Semantic Type:** Sentient **Requires:** Side_2 **Excludes:** Sides	One of two participants in a hostile encounter. While the U.S.'s BATTLE with terrorist-harboring nations is far off ...

Side_2 [Side-2]
Semantic Type: Sentient
Requires: Side_1
Excludes: Sides

One of two participants in a hostile encounter, usually the second mentioned.

While the U.S.'s BATTLE with terrorist-harboring nations is far off ...

Sides [Sides]
Semantic Type: Sentient

The jointly expressed sides in a hostile encounter. They FOUGHT over the right to own land.

Non-Core:

Degree [Degr]
Semantic Type: Degree

Degree to which event occurs

Depictive [Dep]

Depictive phrase describing the actor of an action

Duration [Dur]
Semantic Type: Duration

The amount of time for which a state holds or a process is ongoing.

Instrument [Ins]
Semantic Type: Physical_entity

The instrument with which an intentional act is performed.

Internal_cause [ICause]

The body movement may be prompted by either some outside phenomenon or occurrence, or by an Internal Cause, the Agent's mental or emotional state. Internal Cause is expressed in a PP Complement: Kim FROWNED in concentration. Kim THREW her hands up in despair.

Manner [Manr]
Semantic Type: Manner

Any expression which describes a property of the hostile encounter. Descriptions of the intensity count as Manner expressions. After Brundle's Jaguar took off like a scalded cat, it was Mass who hunted it down, an soon engaged it in a lurid BATTLE.

Means [Mns]
Semantic Type: State_of_affairs

Means describes the way in which a side engages in a hostile encounter. President Corazon Aquino of the Philippines is bracing herself for a legal BATTLE over her decision to allow the remains of the former president, Ferdinand Marcos, to be returned home from Hawaii for burial.

Particular_iteration []

Expressions marked with this extra-thematic FE modify a non-iterative use of the target, and indicate that it is conceived as embedded within an iterated series of similar events or states.

Place [pla]
Semantic Type: Locative_relation

The location at which the hostile encounter takes place.

Following the BATTLE of Naseby in 1645 ...

Reason [Reas] **Semantic Type:** State_of_affairs	The Reason for which an event occurs.
Result [Result]	Result of an event
Time [Time] **Semantic Type:** Time	The time at which the hostile encounter occurs. Following the BATTLE of Naseby in 1645 he died.

FE Core set(s):

{Issue, Purpose}

Frame-frame Relations:

Inherits from: Intentionally_act
Is Inherited by: Fighting_activity
Perspective on:
Is Perspectivized in: Attack
Uses:
Is Used by: Fighting_activity
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also:

Lexical Units:

altercation.n, battle.n, battle.v, bout.n, brawl.n, brawl.v, bw.n, clash.n, clash.v, combat.n, conflict.n, confront.v, confrontation.n, cw.n, duel.n, duel.v, dust-up.n, fight.n, fight.v, fighting.n, firefight.n, fistfight.n, gunfight.n, hostility.n, infighting.n, row.n, scuffle.n, scuffle.v, shootout.n, showdown.n, skirmish.n, skirmish.v, spat.n, squabble.n, stalemate.n, standoff.n, strife.n, struggle.n, struggle.v, tiff.n, tussle.n, war.n, war.v, warfare.n, wrangling.n

Created by 197 on 03/14/2001 05:28:35 PST Wed

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date

O.6 Frame description of `Objective_influence` frame

Objective_influence

Lexical Unit Index

Definition:

An Influencing_variable, an Influencing_situation, or an Influencing_entity has an influence on a Dependent_entity, Dependent_variable, or a Dependent_situation.

More and more doctors realise that diet can INFLUENCE disease.

Our subject is the body clock; how it INFLUENCES our physiology and behaviour and how it interacts with the rhythms in our environment.

But it is more likely that a physical restraint INFLUENCED the swirling liquids.

It claimed, perhaps hollowly, that NT had yet to IMPACT its business.

This kind of elementary boo-boo would certainly IMPACT video speed.

FEs:

Core:

Dependent_entity [depe]
Excludes: Dependent_variable

An entity, usually a thing, that is influenced in its behavior by an Influencing_entity or an Influencing_situation.

The Committee is responsible for making recommendations to the Board regarding the group's activities as they IMPACT on the environment.

Influencing_entity [infe]
Excludes: Influencing_variable

A thing or person whose behavior has an effect on an Dependent_situation, Dependent_variable, or Dependent_entity.

Much of the acreage in this round is closer to the coastline, and as such has many implications in terms of how it could IMPACT upon fish spawning, local bird life, and even the Ministry of Defence in some cases

Influencing_situation [infs]
Excludes: Influencing_entity

Core Unexpressed:

Degree [deg]
Semantic Type: Degree
The Degree to which the Influencing_entity effects the Dependent_entity.

Dependent_situation [deps]
Excludes: Dependent_entity
A situation that whose temporal or other characteristics are influenced by an Influencing_entity, Influencing_event, or Influencing_variable.

> The new network file system server line supports database or backup applications running alongside NFS input/output operations without one activity IMPACTING another.

Dependent_variable [depv]
Excludes: Dependent_situation
A scalar variable, whose value depends on the behavior of an Influencing_entity, a Influencing_variable, or an Influencing_situation.

> This kind of elementary boo-boo would certainly IMPACT video speed.

Influencing_variable [infv]
Excludes: Influencing_situation
A scalar variable (with unspecified value) which has an effect on the Dependent_entity, Dependent_variable, or Dependent_situation.

> Factors which INFLUENCE the stability of the combination include the softness of the car and the trailer's suspension, plus the balance of the trailer.

Non-Core:

Circumstances []
Circumstances describe the state of the world (at a particular time and place) which is specifically independent of the event itself and any of its participants.

Manner [man]
Semantic Type: Manner
Any description of the event which is not covered by more specific FEs, including force (hard, softly), secondary effects (quietly, loudly), and general descriptions comparing events (the same way). It may also indicate salient characteristics of an Influencing_entity that also affect the action (presumptuously, coldly, deliberately, eagerly, carefully).

Place [pla]
Semantic Type: Locative_relation
The location at which the influencing occurs.

Time [tim] The time at which the influence occurs.
Semantic Type: Time

Frame-frame Relations:

Inherits from: Event
Is Inherited by: Control, Transitive_action
Perspective on:
Is Perspectivized in:
Uses:
Is Used by:
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also: Subjective_influence

Lexical Units:

affect.v, effect.n, impact.n, impact.v, influence.n, influence.v

Created by 605 on 04/23/2004 12:00:05 PDT Fri

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
affect.v	**Created**	Lexical entry		605	10/29/2004 05:29:47 PDT Fri
effect.n	**Finished_Initial**	Lexical entry	Annotation	605	04/23/2004 05:29:32 PDT Fri
impact.n	**Created**	Lexical entry		605	10/29/2004 05:30:37 PDT Fri
impact.v	**Created**	Lexical entry		605	04/23/2004 05:28:46 PDT Fri
influence.n	**Finished_Initial**	Lexical entry	Annotation	605	04/23/2004 05:33:10 PDT Fri
influence.v	**Created**	Lexical entry		605	04/23/2004 05:28:11 PDT Fri

O.7 Frame description of `Process_start` frame

Process_start

Lexical Unit Index

Definition:

An Event begins at a certain Time and Place. Reason may also be indicated. NB: Refer to Event frame.

FEs:

Core:

Core Unexpressed:

Event [Evnt] **Semantic Type:** State_of_affairs	Name of the Event which occurs. The crying BEGAN after sunset.

Non-Core:

Depictive [Depict]	Depictive phrase describing the actor of an action.
Duration [Dur] **Semantic Type:** Duration	The period of time for which the Process is ongoing after it has started. In three instances, violence ERUPTED for brief periods.
Frequency [Freq]	The number of times that the specified type of Event begins. Clashes BROKE OUT twice because Kenneth had been arrested.

Manner [Manr] **Semantic Type:** Manner	Manner in which an action is performed.
Place [Place] **Semantic Type:** Locative_relation	Where the Event takes place.
Reason [Reas] **Semantic Type:** State_of_affairs	The Reason for which an Event occurs.
Result [Result]	Result of the Event.
Time [Time] **Semantic Type:** Time	When the Event occurs.

Frame-frame Relations:

Inherits from: Event
Is Inherited by: Activity_start
Perspective on:
Is Perspectivized in:
Uses:
Is Used by:
Subframe of: Process
Has Subframe(s):
Precedes: Process_continue
Is Preceded by: Process_initial_state
Is Inchoative of: Process_continue
Is Causative of:
See also:

Lexical Units:

begin.v, break out.v, commence.v, commencement.n, erupt.v, eruption.n, incipient.a, nascent.a, onset.n, start.v

O.8 Frame description of `Quarreling` frame

Quarreling

Lexical Unit Index

Definition:

A group of Arguers (also expressible as Arguer1 and Arguer2) express incompatible opinions or beliefs about an Issue.

FEs:

Core:

Arguer1 [Arg1] **Requires:** Arguer2 **Excludes:** Arguers	A person who is arguing with Arguer2.
Arguer2 [Arg2] **Requires:** Arguer1 **Excludes:** Arguers	The person who is being argued with by Arguer1. Why are you ARGUING with us.
Arguers [Args]	A group of people in an argument.
Issue [Iss]	The the thing the the Arguers are arguing over or about.

Non-Core:

Amount_of_discussion [amo]	The degree to which the argument has been finished. If you don't believe me now, we'll just have to ARGUE it out.
Depictive [Dep]	A state of the Arguers, Arguer1, or Arguer2 which saliently affects the perception of the action.
Duration [Dur] **Semantic Type:** Duration	The amount of time that the Arguers spend in the altercation.
Frequency [Freq]	The frequency with which the Arguers have a disagreement.
Manner [Man] **Semantic Type:** Manner	A description of the dispute which is not covered by more specific FEs, including secondary effects (quietly, loudly), and general descriptions comparing events (the same way). It may also indicate salient characteristics of the Arguers that affect the action

(presumptuously, coldly, deliberately, eagerly, carefully).
They SQUABBLED heatedly long into the night.

Means [Mns] **Semantic Type:** State_of_affairs	The action that the Arguers perform in order to quarrel with each other.
Medium [Med]	The equipment, language, or other entity that the Arguers use to pursue their argument. When they couldn't get together, they BICKERED over the phone. Having them SQUABBLE in french is better than if I understood it.
Place [pla] **Semantic Type:** Locative_relation	The location at which the Arguers quarrel
Purpose [pur] **Semantic Type:** State_of_affairs	The state-of-affairs that the Arguers or Arguer1 hope to bring about.
Time [tim] **Semantic Type:** Time	The time when the argument takes place.

Frame-frame Relations:

Inherits from: Discussion
Is Inherited by:
Perspective on:
Is Perspectivized in:
Uses: Be_in_agreement_on_assessment
Is Used by:
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also:

Lexical Units:

altercation.n, argue.v, argument.n, bicker.v, bickering.n, disagreement.n, disputation.n, dispute.n, fight.n, fight.v, quarrel.n, quarrel.v, quibble.v, row.n, row.v, spat.n, squabble.n, squabble.v, tiff.n, wrangle.n, wrangle.v, wrangling.n

O.9 Frame description of `Similarity` frame

Similarity

Lexical Unit Index

Definition:

Two or more distinct entities, which may be concrete or abstract objects or types, are characterized as being similar to each other. Depending on figure/ground relations, the entities may be expressed in two distinct frame elements and constituents , Entity_1 and Entity_2, or jointly as a single frame element and constituent, Entities. The similarity may be based on appearance, physical properties, or other characteristics of the two entities. However, no such Dimension has to be specified explicitly. The Entities may be like each other to a greater or lesser Degree. Rather than specifying the Dimension of difference, a Differentiating_fact may be mentioned.

Notice that, although similarity presupposes the notion of a judge who assesses similarity, that judge is not part of the frame of similarity.

A mulberry *is* very SIMILAR in shape to a loganberry

Recovering it afterwards can also *be* SIMILAR to collecting an unsecured loan

Great Britain and Germany *were* only ALIKE in one respect.

Lothlorien *is* quite LIKE most of their other war games really.

FEs:

Core:

Differentiating_fact []
: A fact about Entity_1 or the Entities that reveals how Entity_1 is the same or different from other entities. (Note the contrast with 'as to'.)

His presidency was DIFFERENT in that it offered a way forward for the common man .

Banks primarily DIFFER in offering different rates for different risks .

We are all SIMILAR in having two arms , two legs , a mind , and a heart to feel with .

Dimension []

This FE marks constituents which express a property in respect to which the similarity of the entities is assessed.

The disc announced Friday is physically SIMILAR to current music CDs

Entities []

This FE marks constituents that express the set of objects or types whose similarity is at issue.

The two painters *were* ALIKE in being unable to draw acceptably .

Agbenugba confirms the RESEMBLANCES between his own experience and that of his protagonist.

Entity_1 [ent1]
Requires: Entity_2
Excludes: Entities

When there is an asymmetry, Entity_1 is the entity characterized by its similarity to Entity_2, whose characteristics are assumed to be known. Entity_1 is often an external argument.

In the first phase Barthes's approach *has* SIMILARITIES to that of Levi-Strauss.

Our economy *is* LIKE a healthy plant after a long drought

I found a SIMILAR passage in Tolkien.

Entity_2 [ent2]
Requires: Entity_1
Excludes: Entities

When the Entities are expressed separately, Entity_2 is the one whose characteristics are assumed to be known; it serves as a basis for establishing characteristics of Entity_1.

The results of Method 2 *show* remarkable SIMILARITY to those obtained by Method 1

Leadbelly's recordings are not DISSIMILAR to those of Jimmie Rodgers.

This is a problem DIFFERENT from meltdown only in degree.

Here we see a SIMILAR case. DNI

Non-Core:

Cause []	An inanimate entity or process that causes the similarity.
Circumstances [cir]	Circumstances describe the state of the world (at a particular time and place) which is specifically independent of the event itself and any of its participants.
Degree [] **Semantic Type:** Degree	The extent to which entities are similar to each other, in general or with respect to some Dimension(s) The twins are very SIMILAR.
Depictive []	This FE is used for any Depictive phrase describing the state of the Entities
Manner [] **Semantic Type:** Manner	This FE identifies the Manner in which Dimension is similar or different
Place [] **Semantic Type:** Locative_relation	The Place is the general area in which similarity occurs or exists
Time [] **Semantic Type:** Time	This FE identifies the Time when the similarity occurs or exists.

Frame-frame Relations:

Inherits from: Gradable_attributes, Reciprocality
Is Inherited by: Be_in_agreement_on_assessment, Diversity
Perspective on:
Is Perspectivized in:
Uses:
Is Used by: Correctness, Distinctiveness, Imitating, Typicality
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also:

Lexical Units:

alike.a, differ.v, difference_((count)).n, difference.n, different.a, discrepancy.n, discrepant.a, disparate.a, disparity.n, dissimilar.a, dissimilarity_((mass)).n, dissimilarity.n, distinct.a, distinction.n, image.n, like.a, like.n, like.prep, parallel.n, resemblance.n, resemble.v, ringer.n, similar.a, similarity_((count)).n, similarity_((mass)).n, spitting image.n, take after.v, unlike.a, unlike.prep, variant.n, vary.v, very image.n

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